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EDUCATION ACT PROJECT EVALUATION. PART I.

CINCINNATI PUBLIC SCHOOLS, OHIO, DEPT. OF INSTR.

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THIS REPORT CONTAINS EVALUATIONS OF 1965-66 ELEMENTARY AND SECONDARY EDUCATION TITLE I PROJECTS IN THE CINCINNATI PUBLIC SCHOOLS. THE PROJECTS EITHER OFFERED ENRICHMENT AND REMEDIATION AT THE ELEMENTARY, SECONDARY, OR ADULT LEVEL OR ESTABLISHED SUMMER SCHOOLS OR EDUCATIONAL RESOURCE CENTERS. EACH EVALUATION CONTAINS A PROJECT NARRATIVE AND A DISCUSSION OF EVALUATION PROCEDURES AND RESULTS. THIS ARTICLE IS PUBLISHED IN "JOURNAL OF INSTRUCTIONAL RESEARCH AND PROGRAM DEVELOPMENT," VOLUME 2, NUMBER 2, JANUARY 1967. (DK)

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EDUCATION ACT PROJECT EVALUATION
PART I

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PREFACE

The previous issue of this journal reported an over-all evaluation of the Elementary and Secondary Education Act (ESEA) program conducted in the Cincinnati Public Schools during the latter half of the 1965-66 school year. This issue and the one to follow are devoted to reporting individual project evaluation.

The seven projects contained in this issue are reported together because during the current 1966-67 school year they have been reorganized as two projects (one at the elementary and one at the secondary level), although the component services are essentially the same. Mr. Joseph Ireland is the co-ordinator of the elementary project, and Miss Martha Leeds of the secondary project.

It should be pointed out that maximum understanding of the reports in this journal will result from reading the preceding issue on program evaluation. Findings from program evaluation are often referred to in relation to project objectives.

Each report has two major divisions, which follow the introduction and the statement of objectives. The first main part, entitled "Project Narrative," is essentially a chronological logging of procedures, events, obstacles, etc. as they took place in operating the project. Because the focus of these accounts is project operation, they are likely to be of interest to personnel involved in similar projects. The narratives were contributed by the 1965-66 project directors.*

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*Elementary School Remediation and Enrichment, Martha Leeds; Saturday Morning Enrichment, Lorena O'Donnell; Educational Resource Centers, Marjorie Rogers; Elementary Summer School, Lenore Wirthlin; Parent Education, Anna Cooper; Secondary School Remediation and Enrichment, Martha Leeds; Secondary Summer School, Rosemary Buchanan.

The second major division of each report deals with evaluation procedures and results. Evidence bearing on the fulfillment of each objective is presented. As one reads through these evaluation sections, it will be noted immediately that there are wide variations in the validity of the evidence used to evaluate project objectives. In some instances the results are "self evident," while in other cases the evidence is very tenuous. This situation is the result of many factors, e.g., poorly stated objectives and unmeasurable objectives. The most serious deterrent to the measurement of objectives, however, was the lack of adequate control groups. Unbiased experimental designs can result only from a randomization of uncontrolled factors that may influence results. Such designs are impossible in this context, because the charge of ESEA has been to serve the most disadvantaged children. Unbiased comparisons, therefore, are not possible because of the selection factor operating. This explanation is not an excuse; it is a reality which demands innovative models of evaluative strategies. The Division of Program Development welcomes constructive criticism and suggestions for better evaluation approaches. Further, it is hoped that a mutual sharing of tailor-made instruments will serve to benefit the Cincinnati Public Schools and other school systems.

There has been only a limited attempt to report the details of statistical methodology. We felt that such reporting would add too much to the length of the report and would be of limited interest to the practitioner. When the term "significant" is used in describing an observed difference, this means statistically significant difference and based on some type of statistical test. Persons wishing explanation of statistical methods need only submit such request to the Division of Program Development.

Limited copies of each chapter of this report are available to those persons whose interest is primarily associated with that given project.

Requests for additional copies of this journal or for separate copies of each project's evaluation should be made to Mr. Joe Felix, Associate in Program Development.

James N. Jacobs
Editor

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ELEMENTARY SCHOOL REMEDIATION AND ENRICHMENT

Introduction

This project is aimed particularly at motivating those pupils in primary target elementary schools whose disadvantaged cultural backgrounds have resulted in learning problems. It encompasses a variety of services, all of which are geared to give pupils a more positive concept of themselves, the community and their role in community life.

Among the services planned to accomplish this goal were: the addition of administrative, secretarial and supportive personnel; cultural activities such as excursions and special assemblies; and supplementary after-school programs. The additional teaching personnel were intended to make it possible to work with pupils individually and in small groups, thereby getting to know them better and helping them with school-associated problems. Enrichment and supplementary activities were also designed to help school personnel know pupils better and to make classroom learning experiences more meaningful.

The services provided through this project were supplemented by other projects that served these primary target children. The Health Services project, for example, was directed toward improving the physical condition of disadvantaged children, while the Parent Education project was aimed at increased parental involvement in their education. Hopefully, attending to these needs will make it possible for pupils to devote more energy to school work and increase the chances of success of the motivational efforts of the Elementary Remediation and Enrichment project.

Increases in scholastic achievement are the principal educational outcome hoped for as a result of increased motivation. By making the entire school experience more relevant to life as seen by the disadvantaged pupil, the project is intended to help such a pupil become more psychologically involved in the learning process.

Resource teachers, whose function is to help identify and treat pupils' learning problems, were an integral part of the project plan. Such teachers enable the regularly assigned classroom teacher to devote more time and attention to learning gaps due to absence, cultural deprivation, economic indigence, emotional problems, poor home environment or other adverse elements in the child's background.

Objectives

The objectives of the Elementary School Remediation and Enrichment project are as follows:

1. Early identification and treatment of individual pupils with learning problems.
2. Opportunity to discover individual pupils' talents and interests that can be a basis for building positive feelings about one's self and one's ability to achieve in school.
3. Achievement in school consistent with the potential of each pupil.
4. Involvement of parents and community in the educational process, making school more meaningful to parents and pupils.

Project Narrative

Personnel. The Elementary Remediation and Enrichment project for primary target schools began on February 1 and concluded on August 31, 1966. The project was geared to give stimulation and motivation to elementary pupils from disadvantaged neighborhoods in Cincinnati. To accomplish this, a number of personnel were added to the staffs of the following primary target schools:

Garfield
Hays
Millvale
Peaslee
Raschig
Rothenberg
Sixth District
South Avondale
Washington Park
W.H. Taft
Washburn
Webster
Windsor

Eleven administrative aides were named to the staffs of these schools to implement the project. Under the direction of the school principals, aides were responsible for supervising, organizing and coordinating project services, both during and after the school day. Cooperating with the project director, they ironed out difficulties in operational procedures, arranged for special activities such as field trips and auditorium programs, took care of budgeting for new materials and equipment and made the necessary administrative arrangements for their optimal use. Communication was an important part of the duties of the administrative aides; they attempted to take note of successful instructional techniques and uses of equipment and to share such ideas with project personnel in other schools. Other responsibilities included helping with the evaluation and interpretation of project activities, training and supervising resident aides and volunteers, and setting up special after-school activities.

In implementing the project goal of providing concentrated services for disadvantaged pupils, the resource teacher played a prominent role. In all, 21 resource teachers were used in the project. These specialists had no regular class assignements. They worked directly with pupils who had learning problems, coordinating their specialized instruction with the program of the regular teacher. They were available for group conferences concerning pupils with learning problems or relieved the regular teachers for such conferences. They also assisted in the after-school enrichment programs.

Since reading plays such an important role in learning and since culturally disadvantaged pupils very often have limited reading ability, remedial reading services were another important aspect of this project. Added to the staffs of primary target elementary schools were 10.5 remedial reading teachers. These teachers helped to identify pupils with reading problems; set up special reading groups; served as resource persons for other teachers, parents, and pupils; cooperated with the regular classroom teachers of the special reading pupils; and kept records of the progress of these pupils. They also maintained files and records of materials used and experimented with new techniques to meet the special needs of children with reading problems. Unfortunately, beginning the project in the middle of the year made it impossible to locate enough specialists to fill all the positions called for in the project proposal.

To increase the effectiveness of the above professional personnel, 22 resident aides were used in project schools. One important function of these aides was interpretation of the school and its educational objectives to the community. Since they were residents of the school community, they were often able to relate to parents in such a way as to make the program of the school more meaningful. As part of this basic interpretive function, the resident aides conducted discussion groups with parents. They also assisted the school nurse in following up on school health problems; helped to chaperone at parties and programs and on excursions; and assisted in pupil control in the lunchroom, in the halls, and on the playground.

Because extra-curricular activities were a significant aspect of project services aimed at enriching the school experience of project children, one person was employed to coordinate these activities in each project school. One of the chief responsibilities of these 13 individuals was to obtain the services of the volunteers needed to carry out the extra-curricular programs.

In order that the project staff be free to make the best possible use of their professional skills, additional secretarial help was a fundamental part of the project. In those schools where additional secretarial time was necessary to carry out the project, a part- or full-time secretary was added.

Equipment and Supplies. A substantial part of the budget for the Elementary Remediation and Enrichment project was allotted for the purchase of equipment and supplies that would be specially suited to disadvantaged children. Special books and materials for both remediation and enrichment were purchased, with careful attention paid to the cultural content of printed materials. A special effort was made to select appropriate multi-ethnic books.

In addition, a number of audio-visual instructional devices were purchased to increase the effectiveness of specialized instruction in project classrooms. Unfortunately most of the equipment arrived after the close of the first project year, so that teachers were limited to using equipment that the schools had before the project began. Cameras were used to record children's reactions on field trips. Then pictures were mounted and used in language development work. Tape recordings were periodically made of children's voices. Teachers and pupils then listened to these recordings and noted differences in type and quality of speech.

The equipment ordered especially for this project included the following:

16 mm movie projectors
opaque projectors
listening posts
language masters
film strip viewers and projectors
overhead projectors
transparency making copiers
tape and cartridge recorders
record players
35 mm cameras

Although late arrival prevented the use of this equipment in the first year, it will be used extensively in succeeding years of the project.

Services. Project services were aimed primarily at those pupils who were most educationally deprived. Pupils with learning problems were identified and placed in small groups. These groups were given special attention by either resource teachers, remedial reading teachers, or both. Non-public school pupils also received remedial instruction at nearby public schools.

In addition, pupils progressing at a normal rate were given increased enrichment experiences. It is believed that the higher achiever can contribute to the growth of the underachiever.

Resource teachers and regular classroom teachers made extensive use of excursions to introduce children to the wider community around them and to give them experiences not normally furnished by their homes. Some of these excursions were walking trips, taking the pupils to places of interest within their immediate environment that many of them had never visited. Other trips were made by bus into the larger community. Like the remedial reading instruction, these excursions were open to non-public school children.

Extensive after-school activities also contributed to enriching the background of project children. The principal focus of these activities was on the hobbies and interests of the pupils. Thus, many of them were motivated to participate more actively in the organized program, thereby extending the scope of their interest, developing their natural talents and enhancing the concept they had of themselves.

Since most school buildings were already being used to capacity before the project began, it was difficult to find adequate space for the project activities. Small group instruction had to be conducted in the regular classroom. In some schools attempting too many activities at the same time resulted in confusion.

Despite these difficulties, typical of beginning efforts in an educational endeavor of this magnitude, the Elementary Remediation and Enrichment project completed the first project year with a record of 2526 pupils receiving direct services. In the coming year this project will be enlarged to encompass all of the ESEA remedial and enrichment services provided for elementary target school pupils.

Evaluation Procedures and Results

Because of the broad range of this project and the related secondary level project in primary target schools, much of the information collected for the overall evaluation of the Education Act program is pertinent here.* The procedure for evaluating this project will be to narrow the focus of appraisal to primary target schools only and to relate the findings to specific objectives of the project.

Data that may be used in evaluating the Elementary Enrichment and Remediation project include the following: selected items from the Parent Survey, Teacher Survey and Student Survey; achievement data collected for grades two through six; promotion rates; and scores on measures of pupil self-image.

Because the project began late in the school year, marked changes in data that may be compared with pre-project findings are not expected at this time. Even when pre-project baseline data are available, the comparison of post-project findings will not be extensive. This report will be more concerned with whether the direction of the program seems to correspond with the needs indicated by the data. At best, one might hope to identify a few needed services or project emphases that do not seem adequately covered by current project organization and plans.

Objective 1. Early identification and treatment of individual pupils with learning problems. Pupils with learning problems are found in every school. These problems, often caused by cultural deficiency or unfavorable school experiences, vary in kind from emotional conflicts to lack of essential academic skills. Whatever the nature of the problems, however, educators have become aware of the need to give more concentrated effort to their correction than is possible in a regular classroom situation. Since aggravation of these problems makes dealing with them much more difficult in later years, it has become increasingly apparent that they must be recognized and treated early.

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*For a complete report of this evaluation, see Journal of Instructional Research and Program Development, Volume 2, Number 1, October, 1966.

Such identification and treatment of pupils with learning problems in primary target elementary schools is the cardinal objective of this project. The identification was left in the hands of resource teachers working with the regular classroom teacher, whereas treatment efforts were the shared responsibility of remedial specialists, resource teachers and regular teachers.

Pupils with learning problems are likely to be more common in disadvantaged areas than in suburban communities because of cultural limitations. This probability is confirmed by the Teacher Survey ratings given by primary target elementary teachers on items concerning Motivation of my pupils, The type of pupils I teach, and Previous academic preparation of my pupils. Each of these items was rated much lower by primary target elementary teachers than by elementary teachers in non-target schools.

There is some evidence that pupils themselves feel this need for intensified help. On the Student Survey, more primary target elementary pupils than control pupils gave an affirmative answer to the question "Do you need more help from your teacher?" Likewise, more primary target pupils answered yes to the question "Would you like to talk to your teacher more?", but this difference was not statistically significant.

Evaluation of the effort to identify and treat pupils with learning problems must ultimately focus on their school achievement. Nevertheless, Teacher Survey results provide evidence that primary target elementary staff members felt a strong impact from the remediation and enrichment services provided by the project. A comparison of January and June ratings shows that the four survey items related directly to these services (Provision for academic remediation, Provision for pupil cultural growth, Adequacy of enrichment activities, and Present curriculum for the disadvantaged) increased significantly. Two other items related less directly showed non-significant gains (Provision for emotionally disturbed and Provision for socially maladjusted child). In contrast, in those non-project schools where the survey was administered, the ratings in both January and June on all these items except Provision for emotionally disturbed decreased.

Objective 2. Opportunity to discover individual pupil talents and interests that can be a basis for building positive feelings about one's self and one's ability to achieve in school. A positive self-image is generally considered essential to optimal academic achievement. In the case of disadvantaged pupils, it is commonly believed that a low self-estimate is a characteristic hindrance to higher aspiration and accomplishment. Thus, this project, like most of the other local Education Act efforts, assumes that raising pupil self-concept is a prerequisite to raising pupil achievement.

Teachers who work with project children do, in fact, see the self-concept of these pupils as low. This fact is evidenced by ratings given Pupil image of self and Pupil aspiration level on the June Teacher Survey. Primary target elementary teachers rated both items below the middle of the seven-point scale; the ratings on both were below the mean of all 48 survey items; and, most striking, project teachers' ratings on both items were over a full unit below those of non-target teachers. These June primary target ratings represent a slight increase over the January rating on aspiration level and a similarly insignificant decrease for self-image.

The very limited data available for pre-post comparison, then, show no evidence that pupils' feelings about themselves, as observed by teachers, improved in the first project year. Indeed, noticeable improvement could scarcely be expected in so short a time.

An interesting contrast to these teacher estimates is presented by other pertinent data. Unfortunately, the other approaches to evaluating self-concept permit neither pre-post analysis or comparison with non-project pupils throughout the school system. Rather, in each case, the comparison is with secondary target and "control" groups.

On the Student Survey pupils themselves were asked four questions relevant to self-concept: "Are you satisfied with report card grades?", "Are you doing better in your school work this year?", "Do you think you will graduate from high school?", "Do you hope to go to college?" In no case is there a significant difference in number of affirmative responses between primary target pupils and others.

Internal comparisons among these items provide food for thought. For example, 75 per cent of primary target elementary pupils said they were doing better in school work this year, but only 49 per cent reported satisfaction with their grades. This suggests a commendable desire for further self-improvement. Although 87 per cent indicated they expected to graduate from high school, 90 per cent said they hoped to go to college. Such an inconsistency in the way elementary pupils see themselves is not surprising.

The similarity of self-concept between primary target pupils and others of similar background is confirmed by three instruments used to assess self-concept directly: What I Am Like, Attitudes Toward Self and School, and House-Tree-Person. Although appropriate normative data is not available, the scores of the project children on all these instruments were comparable with those of the secondary target and control groups. Further, the results of each measurement give an impression of a relatively favorable self-concept.

What I Am Like is a locally constructed instrument designed to test self-image in three contexts: physical, psychological and social. Pupils rated themselves on a five-point bipolar adjective scale. Total mean ratings of primary target elementary pupils (grades 4 through 6) on the ten items in each subtest were above the theoretical mid-point of the scale: physical, 3.94; psychological, 3.90; social, 3.77. Only in the social area were project pupils lower than those in secondary target and control schools, and this difference is not statistically significant.

This similarity of self-image also appears in the results of the Attitudes Toward Self and School instrument. This test, used in primary grades, contains 18 sets of smiling and frowning faces. The examiner reads each item and asks the child to blacken the nose of the face that shows how he feels. Although the percentages of primary target, secondary target and control children marking smiling faces were generally similar, two items show a statistically significant difference when primary target children (those served by this project) are compared with the non-project group. More project than non-project children marked the smiling face for "When you get your report card and take it home," (92% vs. 83%), and fewer marked the smiling face for "About growing up and getting older," (70% vs. 81%). The items showing the smallest percentage of smiling faces for project pupils were "When it is time to get up and go to school" (63%) and "About the way other children treat you" (64%). Again, the large percentage of smiling faces suggests a fairly high self-concept, although this must be a tentative conclusion in the absence of normative data.

Children's drawings of a house, a tree and a person were scored on the basis of eight factors identified in the literature on the House-Tree-Person technique. All factors were believed to measure aspects of self-concept. Because no norms are available for the scoring method used locally, comparisons cannot be made with groups outside this evaluation. However, an analysis of variance showed no significant difference in the scores earned by primary target, secondary target and control pupils.

All the above data will serve as a baseline for future evaluation of self-image. After these children have been exposed to Education Act services for a longer time, more reliable conclusions about the effect on their self-concept will be possible.

Objective 3. Achievement in school consistent with the potential of each pupil. If the project is successful in providing adequate remediation and enrichment to pupils with learning problems, this success should ultimately be reflected in higher school achievement. Although no measurable gains are likely to have resulted from the brief period of services in the first project year, ideally the level at which pupils are achieving should match their intellectual ability.

To determine the extent to which this ideal is realized, however, is somewhat difficult. In the first place, human potential is not directly measurable. Although educators rely heavily on tests of general intelligence or scholastic aptitude to assess pupils' capacity, these tests are themselves tests of achievement. Their scores reflect not only innate intellectual ability but also the extent to which this ability had been developed through learning.

In addition, available means of measuring achievement are subject to error. Teachers' judgments of the achievement of their pupils, reflected paritally in promotional decisions, are necessarily somewhat subjective. Even standardized tests can at best measure a sample of the areas of achievement toward which the school aims its program.

If one is, nevertheless, willing to accept these best available means of evaluating pupils' achievement in the light of mental ability, conclusions are possible concerning the degree of success in achieving this project objective. Such evaluation will be facilitated by the accumulation of data in succeeding years. This first evaluation effort must be restricted, to a large extent, to establishing baseline data.

If one disregards differences in pupil potential, the need for raising the achievement level of primary target pupils appears dramatic. First, teacher ratings of pupil achievement indicated by the Teacher Survey responses are considerably lower for primary target schools than for control schools, and still lower than for all non-target schools. Secondly, promotion rates are perennially lower in primary target schools than in control schools at all elementary grade levels. Thirdly, median scores on standardized achievement tests are lower in primary target schools than in control schools at all grade levels.

The picture is brightened somewhat by a comparison of January Teacher Survey results with those of June and by an examination of the responses to pertinent items on the Parent Survey. In both cases there is some indication that respondents felt that achievement was increasing. Primary target elementary teachers rated Achievement of pupils 4.9 per cent higher in June than in January. This was a greater increase than the mean increase for all 44 survey items. By contrast, secondary target teachers and control school teachers rated this item almost identically on the two surveys. When primary target elementary parents were asked whether children were improving in school work, 92 per cent responded affirmatively. This percentage of affirmative responses was exceeded by only three items on the 14 item survey.

Pupils themselves reacted less strongly toward their improvement in school work. Seventy-five per cent of primary target elementary pupils said they were doing better, ranking this item in the bottom half of the 20 items on the Student Survey.

Teacher, pupil, and parent judgments regarding pupil achievement, while of interest, have serious limitations both with respect to their reliability and validity. The more direct approach is the measurement of achievement itself. Pupil achievement was measured in grades two through six.* In all but the sixth grade, testing took place in May, 1966. The sixth grade was tested in February, 1966. Obviously, these data are viewed as baseline data.

The Stanford Achievement Battery was given in grades three through six while the Metropolitan Achievement Test was given in grade two. Reports from teachers and principals indicated concern over testing conditions. They believed the tests were given over too short a period of time, leading to pupil fatigue and discouragement. The importance of this factor is difficult to assess but it should at least be recognized. The sixth graders were not affected by this condition since they were tested in February as part of the regular testing program.

To pursue the question of whether pupil academic achievement matches their potential requires measurements of both. The limitations of scholastic aptitude tests as measures of pupil potential have been discussed. Thus, in attempting to compare the "mental ability" with school achievement one must recognize that one type of achievement is being compared with another (and often similar) type of achievement. Regardless of the fact that aptitude tests measure what has been learned, they do have predictive validity in terms of school achievement. If one is willing to define "potential" in this limited sense, comparison between school achievement and potential can be made.

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*Pupil achievement test results are contained in the ESEA Program Evaluation Report and reported in the Journal of Instructional Research and Program Development, Vol. 2, No. 1, October, 1966.

While no scholastic aptitude testing was done especially for ESEA evaluation, such tests are administered routinely in grades three and six in the regular testing program. The Stanford Achievement Tests do provide median deviations from grade score at various (Otis) IQ levels from the national standardization group. These deviations may be subtracted from the grade norm to arrive at an achievement expectancy based on IQ level. Since deviations are not reported for grade three in the Stanford manual, we could not compare scholastic ability with (Stanford) achievement at that grade. Instead, we assumed that the third grade aptitude test results of the target and control schools in 1964-65 represented the same population of pupils in the fourth grade in 1965-66. This is a fairly valid assumption within a one year span of time.

Comparison of school achievement and scholastic aptitude in grades four and six further required an assumption that the Otis Mental Ability Test (used as the basis for determining median deviations for the Stanford Achievement Test) is comparable to the Kuhlmann-Anderson Test (used locally in grade three) and the Lorge-Thorndike (Verbal) Test (used locally in grade six).

With these possible sources of error in mind, Table 1 presents the actual and "expected" grade scores on the various Stanford sub-tests for pupils in grades four and six in the primary target schools. The estimated median Kuhlmann-Anderson IQ of the fourth grade group was 89.05 while the median Lorge-Thorndike IQ of the sixth graders was 88.10. The grade norms for the fourth and sixth grade pupils were 4.9 (May testing) and 6.6 (Feb. testing), respectively. The "expected" grade scores were derived by subtracting the appropriate deviations from the grade norms for each sub-test.

Table 1 shows that for grade four, expected achievement is greater than actual achievement on all sub-tests except Spelling where actual achievement is one month over expectancy. The largest discrepancy is in Arithmetic Computation which deviates four months below expectancy.

Table 1. Comparison of Actual with "Expected" Achievement of Fourth and Sixth Grade Pupils in Primary Target Schools as Measured by the Stanford Achievement Test.

	GRADE 4 (Norm 4.9)			GRADE 6 (Norm 6.6)		
Sub-Test	Actual Grade Score Median	Expected Grade Score Median	Diff. (Months)	Actual Grade Score Median	Expected Grade Score Median	Diff. (Months)
Word Meaning	3.2	3.5	-2	4.6	4.4	+2
Paragraph Meaning	3.0	3.3	-3	4.6	4.4	+2
Spelling	3.8	3.7	+1	5.1	4.7	+4
Word Skills	2.7	2.8	-1	*	*	*
Language	3.0	3.2	-2	4.1	4.1	0
Arith. Comp.	3.7	4.1	-4	5.0	5.4	-4
Arith. Concepts	3.3	3.6	-3	4.7	4.9	-2
Arith. App.	3.7	3.9	-2	4.5	4.6	-1
Social Studies	3.7	3.9	-2	*	*	*
Science	3.6	3.8	-2	*	*	*

*These sub-tests were not administered.

The remaining sub-tests are 1, 2, or 3 months below expectancy.

The sixth grade results show a rather different picture. Word Meaning, Paragraph Meaning and Spelling achievement are 2, 2, and 4 months over expectancy, respectively. Arithmetic Computation, Concepts, and Applications are 4, 2, and 1 months below expectancy, respectively. Language achievement is at the expectancy level. As in the fourth grade, Spelling is highest achievement area. Arithmetic Computation, while not the lowest achievement area, is farthest below expectancy.

Assuming the pupil composition in grades four and six is similar, there is an inconsistency in these results. Why should the reading and spelling performance increase in relation to expectancy from grade four to grade six? While this result may be intrinsic to the instructional program, it is unlikely. One is inclined to suspect the adverse testing conditions in grade four, which were not present in grade six, as being responsible for the discrepancy.

To the extent that promotion rates may be assumed to reflect professional judgments of pupil achievement, these rates are also useful in evaluating the success of the project in accomplishing this objective. Cincinnati's "Policy on Classification of Elementary School Pupils" (Revised, 1965) specifies: "Primary factors in classification are age, rate of learning, and achievement." This emphasis places the achievement criterion in relation to other promotion standards (secondary factors are also specified), and suggests that learning ability must be appraised along with achievement.

Although no noticeable change was expected in the promotion rates for the first project year, the 1965-66 data were assembled separately from those for the previous five-year period. Table 2 compares primary target promotion rates with the promotion rates of all other elementary schools for the period from 1960-61 to 1964-65 and for 1965-66.

The data in Table 2 show a consistent pattern of lower promotion rates in primary target schools at most grade levels. The smallest differences appear in kindergarten and grades five and six. This phenomenon is probably explained by Cincinnati's promotion policy which strongly discourages repetition of kindergarten, of two successive grades or a total of more than two years in elementary school. In each of the six grade levels, the differences between 1965-66 and the base years (1960-61 to 1964-65) show a larger discrepancy in promotion rates with the primary target schools having the lower promotion rates. These differences, however, tend to be small. Whether this general pattern of lower promotion rates in primary target schools should exist is not within the province of this report. It has been given considerable attention by the professional staff over the years.

Table 2. Comparison of Primary Target and Non-Primary-Target Elementary School Promotion Rates by Grade and Year.

GRADE	Average Per Cent Promoted From 1960-61 to 1964-65 Non-PT Schools	PT Schools	Diff.	Per Cent Promoted From 1960-61 to 1964-65 Non-PT Schools	PT Schools	Diff.
6	98.5%	98.6%	+0.1	99.6%	98.5%	-1.1
5	96.4	96.6	+0.2	97.8	97.4	-0.4
4	95.1	94.3	-0.8	96.6	94.8	-1.8
3	96.3	94.4	-1.9	97.5	93.8	-3.7
2	94.3	93.5	-0.8	96.1	94.2	-1.9
1	86.6	81.7	-4.9	90.4	80.2	-10.2
K	99.9	99.8	-0.1	99.8	99.9	+0.1
Weighted Average All Grades	95.1	93.3	-1.8	96.4	93.3	-3.1

When primary target rates for the first project year are compared with those for the preceding five-year (baseline) period, no consistent pattern from grade to grade is evident. Negative and positive differences are approximately equal and the weighted averages are identical. By contrast, the non-primary-target school rates at every level except kindergarten are higher for 1965-66 than for the baseline period. This accounts for the larger negative differences between primary target and non-primary-target rates that appear for 1965-66.

Objective 4. Involvement of parents and community in the educational process, making school more meaningful to parents and pupils. The importance of involving parents in the education of their children can scarcely be debated. A child who finds no interest in education in his home, who is not supported in his pursuit of intellectual gains, is seriously handicapped. If the things he is taught at school are in conflict with what he is exposed to at home, the net result is likely to be general confusion.

The Enrichment and Remediation project sought to increase the involvement of both parents and community in the education of primary target school pupils. This involvement was promoted through the use of resident aides in making home contacts and conducting study-discussion group sessions. Community involvement was promoted through enrichment activities, especially after-school trips and excursions.

The need for such emphasis in the services of the project is reflected in the ratings given on the Teacher Survey to items concerning parent and community involvement. Three items concerning parent involvement, participation and support were rated appreciably lower by primary target than by all non-target elementary teachers in the June survey. The difference on each of the three items was over one unit on a seven-point evaluative (poor to good) scale; primary target teacher ratings, on the average for these three items, were twenty-five per cent lower than non-target teacher ratings. In spite of this situation, there is evidence that the situation got better from January to June in primary target schools. The ratings are as follows:

Concept Rated by PT Teachers	January Rating	June Rating	Diff.
Parent Involvement	2.94	3.23	+.29
Parent Participation in School	2.74	2.93	+.19
Supportive Attitude of Parents	3.70	3.71	+.01

Thus, while the means are far below those in non-target schools and below the general mean of primary target teacher ratings (4.11 in January and 4.23 in June), there is evidence that this objective is being met to some degree. Further, teacher ratings of Field trip opportunities increased from January (4.47) to June (5.82), a total increase of 1.35. In fact, all Teacher Survey items related to parent and community involvement were rated higher in June than in January.

This indication of improvement is strengthened by an examination of the results of the Parent Survey and the Student Survey, both of which were administered in the course of the project. Unfortunately, since these surveys were not conducted on a city-wide basis, comparisons must be limited to target and control schools.

More parents of primary target children than of secondary target and control youngsters said they were encouraged to participate in school (84% vs. 81%) and were active in school (42% vs. 32%). On the Student Survey however, primary target pupils answered items on parent involvement about the same as secondary target and control pupils. Slightly more pupils said someone at home had talked to their teacher (81% vs. 79%), that they got praise at home for good schoolwork (82% vs. 80%), and that they talked about their future career at home (86% vs. 85%). Only on the item Do you talk about school at home was the percentage of affirmative response smaller in primary target schools (79% vs. 84%). Concerning community involvement through field trips, primary target pupils were also slightly more affirmative in their responses: Do you enjoy field trips (98% vs. 95%); Do field trips help you in schoolwork (77% vs. 73%).

In addition to suggesting project success in achieving community involvement, the percentages on these two field trip items seem to have another implication. About a fifth of the pupils who acknowledge that field trips are pleasant fail to see any academic benefit resulting from them. This is true in both project and non-project schools.

Recommendations

On the basis of the preceding evaluation the following recommendations are made:

1. That continued effort be given to identifying and treating disadvantaged children with learning problems, along with a careful systematic evaluation of the progress of these pupils. The achievement data assembled in the first year of the project constitutes a baseline for comparing similar test results after pupils have received more extensive Education Act services. Through such comparison, as well as ongoing teacher appraisal of pupil progress, the overall success of services similar to those rendered in this project can be evaluated.

2. That target school teachers re-examine their estimates of pupil self-image. Available evidence seems to indicate that pupils' images of themselves are higher than teachers typically believe them to be. Possibly the values upon which these children judge themselves are sufficiently different from the bases of the teachers' judgment to cause this discrepancy.

3. That field trips and other efforts to enrich the background of target school pupils through exposure to the community be carefully interpreted to the pupils. There seems to be a danger that these experiences may become valued as means of entertainment rather than being seen as educationally beneficial.

4. That there is a need to identify a relatively small sub-group of disadvantaged children within each target school to whom concentrated services are given. The benefits from this project cannot be spread too thin. If they are, no pupils will be benefited significantly. With this principle applied, the evaluation strategy will be changed accordingly.

Summary and Conclusions

The Elementary School Remediation and Enrichment project was designed to motivate pupils with learning problems and to assist these pupils in overcoming difficulties that have resulted from their deprived background. Additional personnel were employed to permit small group instruction as well as enrichment and supplementary activities directed toward this goal.

Information that is available for evaluating project success and achieving fundamental objectives is generally favorable. The project seems to be answering definite needs felt by teachers, pupils and parents of the primary target schools. Pupils identified as having learning problems are being given small group instruction and encouragement to overcome these difficulties. The self-image of primary target pupils compares favorably with that of secondary target and control pupils. Although pupil achievement seems to be somewhat below the expectation that corresponds to their mental ability, this deviation is generally small and may be due to inaccuracies of measurement or adverse testing conditions. Finally, parent involvement in the primary target schools seems to be on the increase, thus leading to the inference that pupils will receive support at home to do well in schoolwork.

In addition to these encouraging signs, this evaluation of the first year's project efforts has provided baseline data for future evaluation. As these same pupils continue in school, a systematic attempt will be made to measure their progress. On the basis of this ongoing evaluation, project services may be modified or refined in order that the attention given to these disadvantaged pupils might be of optimal benefit in remediating their academic deficiencies and enriching their background.

SATURDAY ENRICHMENT

Introduction

The Saturday Enrichment project is designed to enrich the educational experience of fifth and sixth grade children in target area schools through small classes and individualized instruction. Although the project is an addition to the regular school curriculum, it attempts to supplement and further the same goals as the regular program.

While pupils selected for this project represent the top ten per cent in their school, it is nevertheless believed that this project has a sound rationale in keeping with the Education Act. First, it is reasoned that since these pupils do come from disadvantaged environments they probably have a potential which surpasses that which they are currently showing, even though their achievement may be higher than that of other pupils in the school. Secondly, many citizens feel that these pupils are future leaders and their potential should be developed on a high priority basis. Thirdly, this project represents only a very small proportion of the Education Act program in Cincinnati and gives the program a scope that it would not have otherwise.

Objectives

In the original planning, five overall objectives were designated:

1. To strengthen the child's self-image, through the use of the skills he possesses.
2. To build and reinforce interests so that the child can work more effectively in his regular school setting.
3. To stimulate the child to work creatively in the areas of interest such as art, drama, literature, mathematics, music, science, etc.
4. To offer each child an additional opportunity to work in an environment that is conducive to strengthening values.

5. To provide opportunities for good working relationships between parents and school through parent meetings and participation.

Project Narrative

The Saturday Enrichment project was implemented on Saturday, February 2, 1966, with an orientation meeting held for eight coordinators, 48 teachers, and 14 volunteers to acquaint them with the following items:

a. Type of children enrolled

b. Structure of program, i.e., schedule

c. Organization of curriculum

The sessions for the pupils began Saturday, February 9, 1966, and continued for seven continuous Saturdays, ending with a culminating program for parents on April 2, 1966. Although 805 fifth and sixth grade able learners from 29 public and 14 non-public feeder schools were enrolled in their eight centers, the average attendance per Saturday was 703.

Classes were organized according to the areas of interest which boys and girls indicated on pupil interest inventories administered prior to the start of the program. These classes emphasized the practical and the academic aspects of science, mathematics, dramatics, reading, and social studies.

Although each center was staffed with five academic teachers and a resource teacher, no two centers operated in the same way, for the interests, skills, and resourcefulness of both children and teachers were utilized. The resource teacher was scheduled and assigned to provide enriching activities as the interests of the children demanded within the framework of the teachers' abilities. The following list indicates the scope of the activities provided by resource teachers:

1. Art appreciation

2. Interpretive dancing

3. Original music compositions

4. Music appreciation (films, records, etc.)

5. Staging of skits, etc.

In order that all children might have equal opportunities for cultural enrichment through trips and excursions, a pre-scheduled activity program was arranged by the project director with two stipulations:

1. The coordinator and teachers had the option of rejecting the schedule provided substitutions were made.

2. The budget provided flexibility for the coordinator and/or teachers to take additional trips.

Each center therefore was recipient of a String Trio performance, a story-teller from the public library, a trip to a university theater group and the U.C. Science Fair. In addition to these activities, other excursions were taken.

The project called for two adult volunteers to be assigned to each of the 48 teachers. Because the project was scheduled to be implemented ten days after the receipt of its approval, it was difficult to recruit the number of volunteers proposed in the project. Since previous contact had been made with the Procter and Gamble Company, every effort was made to recruit men from this industry for the science classes. Sixteen volunteers were recruited from Procter and Gamble, who were assigned to math and/or science classes. Three of these volunteers subsequently recruited their wives, who were assigned to dramatics or social studies classes. All the volunteers in the program held master degrees in chemistry, or English, and some held doctoral degrees.

A volunteer was assigned to work with a small group of children in the area of his proficiency under the leadership of a certificated elementary teacher. The teacher was, therefore, available to consult and plan with the volunteer in order to provide the best program for the children.

Evaluation Procedures and Results

The evaluation of the project must center on how well the predetermined objectives have been met. Through a close analysis of the responses on the various evaluation forms used in the project, conclusions can be reached about its effectiveness.

Nine instruments were designed to yield evaluative data for the project:

1. Pupil Interest Inventory
2. Parent Survey
3. Pupil Questionnaire
4. Volunteer Questionnaire
5. Teacher Questionnaire
6. Parent Questionniare
7. Pupil Survey
8. Pupil Record
9. Coordinator Report

The first two of these forms were completed at the start of the project, the other seven near the end. In addition to data concerning the five main objectives, the evaluation forms yielded general information about procedural considerations for more effective operation of the project and overall project evaluation.

Some of the information collected for the broader evaluation of the effects of the total Education Act program is also pertinent to evaluating Saturday Enrichment. Relevant items on these large-scale instruments will be related to Saturday Enrichment objectives in this report. Specifically, the responses of pupils in target elementary schools to certain items on the Student Survey* and the responses of parents of target elementary pupils to certain items on the Parent Survey* will be discussed. It must be noted, however, that the Saturday Enrichment project served only 8.6 per cent of the target elementary pupils who took the Student Survey and an even smaller percentage of the target elementary pupils whose parents were sampled for the Parent Survey.

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*A full description and report of these surveys may be found in the Journal of Instructional Research and Program Development, Volume 2, Number 1, 1966.

Objective 1: To strengthen the child's self-image, through the use of the skills he possesses. The goal of improved self-image, common in all phases of education, eludes objective measurement. On the Saturday Enrichment forms only one evaluative item was related to this goal. In item 6 of the Pupil Questionnaire, pupils were asked whether the Saturday morning classes had helped them in their regular school classes. Of 651 pupils responding, 549 (84.3%) answered yes.

Only one center reported the individual pupils' comments on how they had been helped. In this center 54 of 64 pupils said the Saturday classes had helped them, and 46 of these cited ways in which they had been helped. Thirty pupils generalized that they were helped in a specifically named subject, presumably one of their enrichment subjects. Seven noted specific phases of subject matter in which the enrichment classes had helped them. Three pupils indicated that their work at their home school had generally improved; three said they learned more in their enrichment classes; two indicated a higher level of interest in school work; and one pupil admitted that he did not know exactly how he had been helped.

The feeling of having improved in school work was also evident in the responses of fourth, fifth, and sixth grade pupils in all target schools to the Student Survey. Although only 49.6 per cent of the respondents indicated satisfaction with their report card grades, 73.1 per cent said they were doing better in their school work this year.

Objective 2. To build and reinforce interests so that the child can work more effectively in his regular school setting. The improvement in school work noted by pupils themselves was confirmed by parents, with 92.6 per cent of the sample in the Parent Survey reporting that their children had improved. The degree to which the Education Act program might have contributed to this apparent scholastic improvement is difficult to determine. Even less measurable is the exact effect of any one project.

Grades and attendance statistics of Saturday Enrichment pupils were collected on the Pupil Survey form specially designed for this project. However, since no control group of comparable non-enrichment pupils was surveyed, one cannot safely say that differences in grades and attendance were Enrichment project effects. Nevertheless, a comparison of pupils' records for the second report period, which preceded the enrichment experience, and the third period, during which the enrichment classes were held, suggests some interesting possibilities.

Table 1 shows the percentage of students in a random sample whose marks in each of five subject areas increased, decreased, and remained the same. If one assumes that variation in grades due to chance factors would be equal in positive and negative directions, the *actual* improvement in grades is significant.*

Attendance figures suggest an increase of absence in the third period, but this difference is not statistically significant. In the random sample of pupils for whom the Pupil Survey was completed, those having no absence for the report period decreased from 43.5 per cent in the second period to 36.2 per cent in the third. Total number of days present showed a comparable, non-significant decrease. Thus the apparent differences in attendance

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*In subjects taken in the enrichment program the difference is significant beyond the .02 level of confidence (chi square=5.68); for non-enrichment subjects, beyond the .05 level (chi square=4.08); and for the overall difference, beyond the .01 level (chi square=9.28).

Table 1. Summary Analysis of Sample of Enrichment Pupils' Regular Day School Marks.

	Arithmetic	Language	Reading	Science	Social Studies	TOTAL
Percentage of Report Card Marks in Subjects Taken in Enrichment Program Which:						
Increased	16.9	17.9	12.9	29.4	27.5	21.3
Decreased	14.3	10.7	9.7	13.2	15.0	12.9
Remained Same	68.8	71.4	77.4	57.4	57.5	65.8
(N) =	(77)	(56)	(31)	(68)	(40)	(272)
Percentage of Report Card Marks in Subjects Not Taken in Enrichment Program Which:						
Increased	23.4	16.1	18.4	27.3	23.6	21.4
Decreased	14.1	14.9	11.4	20.8	17.9	15.6
Remained Same	62.5	69.0	70.2	51.9	58.5	63.0
(N) =	(64)	(87)	(114)	(77)	(106)	(448)
Percentage of Total Marks in Subjects Taken or Not Taken Which:						
Increased	19.9	16.8	17.3	28.3	24.7	21.4
Decreased	14.2	13.3	11.0	17.2	17.1	14.6
Remained Same	65.9	69.9	71.7	54.5	58.2	64.0
(N) =	(141)	(143)	(145)	(145)	(146)	(720)

figures might be due to chance factors. Again, in the absence of a control group it is also impossible to rule out other contributing factors such as weather conditions.

Whatever the cause of difference in grades and attendance there can be no doubt that parents believed that their children were helped by the Saturday classes. Of 658 parents responding to the item on how children had been helped 619 (94.1%) indicated that some help was recognized; 164 parents felt that the Saturday classes had improved their children's regular school work; 270 said their children were more interested in school subjects; and 185 indicated that their children had worked on enrichment projects at home. Only 39 parents marked the fourth alternative, "has shown no difference."

Parents were also asked to rate the interest of their children in the Saturday classes. Of 318 parents responding to this item, 299 (94.0%) rated the interest level favorable ("definitely interested," "interested most of the time," or "strongly interested."). Fourteen parents rated their children "mildly interested," and only five indicated a low interest level. In evaluating the above parent responses, one should note that only 38.9 per cent of the parents to whom questionnaires had been distributed responded to the item on interest rating, while 80.4 per cent answered the question on how their children had been helped.

Objective 3. To stimulate the child to work creatively in the areas of interest such as art, drama, literature, mathematics, music, science, etc. The findings reported above suggest the program had a measure of success in the eyes of pupils and parents. Pupils judged that they had been helped, and parents felt that their children were both aided by the classes and interested in them.

Certainly the assignment of pupils to specific subjects had a great effect on this important factor of interest. Although the program's third objective concerned creative activities in interest fields, no estmate or indication of the quality of creativity was provided by the evaluation forms. One may say, however, that a prerequisite to attaining this objective was assignment to subjects in which pupils indicated a degree of interest.

To assist in scheduling, an interest inventory was given at the start of the program. Responses received on this form were used in organizing classes at each center. Only three centers reported the number of pupils assigned to subjects they had chosen. These reports indicated that at these centers 88.6 per cent of the pupils were placed in their first choice subject and 84.0 per cent in their second choice.

Perhaps the best index of whether pupils were stimulated to work creatively is the extent to which they devoted time to projects at home. There is an interesting, if not surprising, discrepancy between pupil and parent reports in this regard. Of the pupils, 90.8 per cent said that they had spent some amount of time at home on their enrichment projects. Only 28.1 per cent of the parents supported this assertion. Almost certainly, however, this difference is due largely to the different structure of the two items and the ambiguity of the parent question. On the Parent Questionniare, "Worked on projects at home" was offered as one of three alternative ways children had been helped, and the option of checking more than one of these was not specified. On the Pupil Questionnaire, however, the item offered a simple Yes-No choice. In this regard, it can be noted that of the total elementary target school parent population 90.5 per cent indicated that their children spend time at home studying. Other pertinent findings from the Student and Parent Survey forms used for program evaluation are: 81.7 per cent of the parents believe that the school has helped their children in the use of out-of-school time, 84.0 per cent of primary target elementary school pupils indicated that they read library books and 60.4 per cent said they read more than is required by their school work.

Objective 4. To offer each child an additional opportunity to work in an environment that is conducive to strengthening values. The concept of pupil values covers an extremely broad range. It is impossible to evaluate the effects of any program on this complete gamut. The project's fourth objective, however, focuses on the atmosphere in which pupils work. Although there is little confirming research evidence, it is a common assumption that worthy pupil values will be strengthened by any program that is educationally sound.

A few hints related to pupil values might be gathered from the pupil questionnaire on which pupils were asked to give reasons for preferring one of their enrichment subjects to another. To infer some of the values of pupils, an attempt was made to classify the responses to this open-ended question reported by two centers. Of 97 pupil responses listed, about half directly concerned academic factors: 28 stated generally that they found the preferred subject interesting or more interesting than the other, and 21 commented on the amount of learning. Eight students looked further into the practical benefits of the enrichment experience, five of them volunteering that it was helpful in their regular classes, and three relating it to an occupational goal. Activity, either general or in the form of projects and experiments, was the basis of preference stated by 17 students. Six others referred to specific aesthetic values of art or music. Factors that might be described as social values (having fun, liking the teacher, being with friends) were cited by 12 pupils. The other six responses could not be classified.

On the Pupil Record, enrichment pupils were rated by both enrichment and regular teachers on six personality factors: influence and leadership, responsibility, confidence, participation, industry, and quality of work. In general these ratings showed a marked consistency, with the average rating falling, as expected, slightly above the mid-point of the scale.

However, all teachers tended to rate pupils lower on quality of work than on the other five characteristics. This tendency may be traceable to higher expectations on the teachers' part for this select group of students.

The ratings given by regular teachers on the industry trait varied considerably less than any other group of ratings; the standard deviation of these ratings was .39, while no other set of ratings had a standard deviation lower than .70. This difference seems to suggest that, although the regular teachers did not rate these students higher than the enrichment teachers, they saw them as more alike in the amount of effort expended on school work than in any other characteristic. Enrichment teachers, on the other hand, comparing these pupils with one another rather than with members of more heterogeneous class groups, recognized sharper differences in the amount of effort expended.

Although none of the parent responses on the Saturday Enrichment forms pertained to the fourth objective the parent survey used in program evaluation indicated that parents in all elementary target schools thought that (1) the school helped their children stay out of trouble in the neighborhood (81.9%), (2) their children had become more helpful around the house because of what they learned in school (73.4%), and (3) the school helped their children behave at home (86.0%).

Objective 5. To provide opportunities for good working relationships between parents and school through parent meetings and participation. Favorable parent reaction to both the Saturday Enrichment project and to the total Education Act program would normally be expected to enhance parent association with the school. Unfortunately little evidence is available to determine the extent to which sympathy with the schools objectives translated into improved practical school relationships among parents of Saturday Enrichment pupils.

It is possible, however, to compare the percentage of returns on the two parent forms, one distributed at the start of theprogram and one at its conclusion. In doing so one finds little difference, despite the fact that an effort was made to improve the method of distribution on the second form. The Parent Survey form, distributed at the start of the program, was returned by 53.7 per cent of the parents, while the concluding Parent Questionnaire was returned by 50.6 per cent. There might have been a stronger motivation to return the first form since some parents might have felt that failure to do so would hinder their children's opportunity in the program.

Procedural Considerations: Curriculum. Attainment of objectives set for any program is largely dependent on organizational structure. Poor planning and administration can hamper the effectiveness of the best intentioned program and the most dedicated educational personnel. Conversely, efficient organization is a valuable aid in carrying out one's purposes. In organizing an educational program, the subject matter to be taught is certainly a primary consideration.

Classes offered in the Saturday Enrichment Program were determined by a preliminary survey of pupil interest. Then, at the end of the program, pupils were asked which of their enrichment classes they liked better and what subjects they would like to take in future programs. An analysis of the results reveals significant differences between the initial interests and the post-program preferences and selections.* Table 2 shows the percentage preferring each subject after taking it, and the percentage selecting each subject for the next session.

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*For differences between pre-program interest and post-program preference, chi square = 66.47. For differences between pre-program interest and next-session selection, chi square = 40.54. With four degrees of freedom both are significant beyond the .01 confidence level.

Table 2. Percentage of Enrichment Pupils Designating Each Subject Area As Interests, Preferences, and Selections.

	Pre-Program Interest	Post-Program Preference	Next Session Selection
Science	31.3	39.6	40.1
Creative Language	26.3	29.4	22.5
Math	24.1	19.1	23.2
Social Studies	13.5	4.8	7.5
Reading	4.8	7.1	6.7
TOTAL	100.0	100.0	100.0

Science, the most popular subject in the pre-program interest survey, showed appreciable gains in both post-program preference and next-session selection. Creative languages, although popular in the post-program preferences, was less commonly selected for the next enrichment session. On the other hand, mathematics, ranking third in both pre-program interest and post-program preference, was second in next-session selection. Social studies showed a marked decline from pre-program interest to preference after the program, but regained somewhat in selection for the next session. Reading, although the least commonly chosen both for the past and for future programs fared better than social studies in post-program preferences. Coordinators, in their report, supported the student preferences for science as most beneficial with creative language also mentioned as an area that seemed to meet the needs of the enrichment pupils.

The regular school grades of a sample of enrichment pupils were examined for the second report period, which immediately preceded the enrichment selection. No significant difference was found in grades earned by the group in various subjects. Furthermore, since enrichment is the basic goal of the program, it would seem doubly advisable to continue to base the determination of curricular offerings solely on pupil interest.

Some dissatisfaction, with the Interest Inventory form, however, was expressed on the Teacher Questionnaire and the Coordinators' Summary. This form is being revised for future enrichment sessions.

Procedural Considerations: Activities. Two kinds of activities, assembly programs and field trips, were used to broaden the experience of pupils in the enrichment program. The value of these programs was appraised by pupils, teachers, and coordinators. Pupils judged both kinds of experience very worthwhile with 97.7% of their responses favoring the assembly programs and 97.9% favoring the field trips.

In general, teachers also felt that the supplementary experiences made a worthwhile contribution. Eighty-three of 87 teachers' responses indicated a feeling that the assembly programs were worthwhile, and 53 of 59 responses confirmed the value of the field trips. Teachers felt, however, that more time should have been allowed for the trips themselves and for follow-up discussions.

Coordinators also indicated that the assembly programs and field trips were helpful, but they expressed an objection that these activities consumed too much class time. A common suggestion from coordinators was that a list of available field trips be provided to each enrichment center.

Procedural Considerations: Volunteer Services. Adult volunteers were used in the Saturday Enrichment Program to help the teachers work more closely with enrichment pupils. The services of these adults were evaluated by the volunteers themselves and by the enrichment teachers. The general trend of the evaluative responses was strongly in favor of continued and expanded use of volunteer service.

Volunteers felt challenged by working with the pupils and indicated that this challenge was the most appealing part of the experience. The volunteer group was evenly divided in their reaction to the question whether their services had been used to the best advantage. Several of them felt that smaller classes and more adequate time allotments would have increased the value of their contributions. They were in favor of an increased number of volunteers, better organization of the services, and improved communication. Eight of thirteen indicated that the major problem experienced as a volunteer was lack of time.

Teachers also felt that volunteer services made a helpful contribution. Twenty-nine of 33 teachers indicated that volunteers were "always helpful," and none found them to be "interfering." Adults from industry were found to be of greatest value in assisting the teachers. Among the teachers' suggestions for improving their relationships with volunteers, only one, the subject of an advanced meeting for planning, was mentioned with any frequency.

Procedural Considerations: Organization. In organizing the enrichment program, one of the key considerations was the kind of pupils to be included in this experience. At the conclusion of the program, teachers were asked several questions related to pupil selection. They felt that: (1) students who previously attended enrichment sessions should be allowed to enroll again in future sessions; (2) the program would be extended to all pupils in the top quarter of their class; and (3) the pupil selection for this first enrichment program had identified those who could derive most benefit.

Other aspects of the organization of the program were appraised by the teachers and corrdinators. Teachers identified a number of chief organizational problems that hindered their work: inadequate time, lack of proper equipment and supplies, and frequent interruptions in their class work. When asked whether equipment and supplies were satisfactory, 22 of 46 teachers replied that they were not. Teachers suggested that the concluding assembly program should be extended and that the initial interest inventory should be redesigned and administered earlier.

Overall Project Evaluation. Additional reactions of pupils, volunteers, teachers and parents pertain to the overall evaluation of the project. Each of these groups showed wholehearted approval.

Of the pupils, 94.7% indicated they would encourage a friend to take advantage of enrichment classes. Every volunteer said he would recommend serving as a volunteer to a friend. Forty-six of the 47 teachers and 406 of 414 parents (98.1%) favored continuing the Saturday Enrichment program.

Together with their enthusiastic support for the program, many of the personnel involved offered general suggestions for improvement. Pupils, teachers, volunteers, and coordinators, for example, commented in favor of longer sessions to provide more time. This time extension could possibly take the form of either a longer weekly session or increased length of semester. However, the frequency of the pupils' comment about having to get up early suggests that the starting time for classes should certainly not be advanced.

Several teachers and coordinators also favored extending the program. Some mentioned including more children, but a more common suggestion was the addition of some specific subject offering. Enlarging the scope of the program to include a greater variety of fine arts offerings is probably worth considering.

Recommendations

The following recommendations seem to follow from this evaluation.

1. Continuation of the project to meet the same long range objectives. Focus on these objectives should be sharpened through a clearer designation of specific short term goals.

2. More efficient design and use of instruments for evaluating the success of the program. The evaluation plan should be determined in the context of appraisal of the total Education Act program.

3. Early use of a more sophisticated instrument for determining pupil interest as a basis for organizing classes.

4. More careful planning of field trips with the provision of sufficient time to derive maximum learning from the trip and from the following discussion. Providing each enrichment center with a list of available trips will promote better coordination.

5. Expansion of volunteer services as time permits a greater recruitment. A planning meeting at the start of the project and organizational meetings throughout its duration seem essential for optimal use of volunteers.

6. Selection of pupils on the same basis as initially with those who participated being welcomed to return. If facilities and budget permit, consideration might be given to allowing pupils in the 75th through 90th percentile in class standing to enroll.

7. Inclusion of a variety of offerings from the fine arts area as these seem to interest pupils.

Summary and Conclusions

Although data directly related to the attainment of the original objectives of the project are sparse, the findings reported here are strongly positive. Pupils saw themselves as being helped by the enrichment classes. Parents felt that their children were aided and that they were interested in their Saturday subjects. Volunteers and teachers and administrators agreed that the program was worthwhile.

Although no firm conclusions can be drawn about the effectiveness of the project on the basis of pupil grades and attendance, grades did show an improvement from pre- to post-project, while no significant change was noted in attendance.

Strong endorsement of the Saturday Enrichment project by all who were involved suggests that the program be continued without change in its major emphasis. As with any new program, however, this project can be improved as it proceeds through further refinement as project director and staff learn from past experiences.

EDUCATIONAL RESOURCE CENTERS

Introduction

The Educational Resource Centers project was initiated in the target elementary schools of the Cincinnati Public School system to fill a long-recognized need for learning and resource facilities. Such centers are seen as an important supplement to the instructional program. They also play a vital role in supplying books and materials needed to implement other Cincinnati projects under the Education Act.

Shortage of funds has prevented full development of libraries in Cincinnati schools. Although all secondary schools have library facilities, they are largely limited to collections of books, rather than providing a full scope of learning media. Limitations have been even more severe at the elementary level. Among the 32 target elementary public schools, only seven had libraries at the time the project was initiated. Book collections in these libraries were inadequate, and scarcely any other instructional resources were included.

To remedy this condition, the Educational Resource Centers project aimed to provide learning centers for the 25 target elementary schools without libraries and to upgrade the facilities in the other seven schools. In this way it was hoped that pupils whose home environment offered little intellectual stimulation or cultural experience would be helped in their efforts toward self-improvement, through education. But mainly, the resource centers were to increase the effectiveness of the overall Education Act program in Cincinnati by supporting the other projects. Use of the center facilities and materials especially selected for their appropriateness in target schools would make it possible to meet the individual needs of specific children. Thus, teachers who had been handicapped by a lack of materials meaningful to disadvantaged children were to be provided with more effective means of involving the pupils in the learning process.

Another aspect of the services provided through the resource centers is furnishing professional materials for teachers. These materials were to help teachers understand deprived children and their environment and to introduce them to techniques and methods for working with these children.

Although the guidelines for the Education Act made it possible to establish such resource centers only in public schools, the centers were also to be made available to pupils of the non-public schools in the project attendance areas. Private school classes might use equipment and materials at the center, or individual pupils might borrow them. Teachers in the private schools might also borrow materials for their own professional enrichment. They would also have the privilege of taking needed equipment or materials to the private schools for as long as necessary.

Objectives

The instructional objectives of the Educational Resource Centers project are as follows:

1. To improve reading skills both within and outside of the framework of the regular reading program.
2. To augment the supply of diversified reading and audio-visual materials requested by other projects.
3. To aid the teachers in individualizing instruction for children who have special needs by supplying additional appropriate materials.
4. To teach use of library tools, materials and other instructional media to pupils and also to teachers.
5. To satisfy children's natural and spontaneaous curiosity.
6. To arouse latent interests and stimulate creative thinking.
7. To guide children in their selection and evaluation of information sources and so help them to develop skill in making choices and in using these sources.

8. To teach appreciation of books, records and educational films as a resource for personal enrichment and advancement.

9. To encourage the library habit as a wholesome recreational activity.

10. To provide a place in which pupils may work independently on activities planned to meet their particular needs, with emphasis on programmed learning.

11. To provide an additional setting for practice in self-discipline and social responsibility.

12. To involve parents in whatever ways may be possible which will promote a concern in the education of their children.

Project Narrative

Inauguration. When the possibility of available funds under the ESEA became known, it was the decision of the Cincinnati Public Schools to extend the learning resources in every school in areas with the highest concentration of disadvantaged children, and to supplement existing facilities in centers already established under the Board of Education's own Compensatory Education plans.

Four primary target and three secondary target elementary schools already had libraries. These schools are Millvale, Sixth District, Washington Park, Webster, Heberle, Hoffman and Rockdale. In addition to adding to the materials available in these libraries, the project proposal called for establishing new centers in the other 25 target elementary public schools.

A planning committee was formed composed of representatives from the public and parochial schools. The committee was made up of two Cincinnati school librarians, the Supervisor of Library Services, a remedial reading specialist, the Administrative Supervisor of the Visual Aids Exchange, a representative of the Roman Catholic parochial schools and, as advisor, a member of the Office of Economic Opportunity. The committee held its first meeting May 5, 1965, and met several more times before the project proposal was ready for writing.

According to the 1960 census reports, the number of children who might qualify under ESEA was 26,423 for public schools and 2,574 for private and parochial schools. The advisor from the Office of Economic Opportunity developed a time schedule to mesh with the Board of Education's general program of center development.

The advisor also prepared a budget based on estimates supplied by the Supervisor of Library Services and the Department of Business Administration of the Cincinnati Board of Education. The estimates related to books and other instructional materials, processing these materials, equipment and supplies for the centers and for project administration, construction and remodeling of classrooms, and professional and clerical staff for the centers and for project administration. The grand total of the estimated budget for April 4, 1966, to August 31, 1966, was $1,054,837. Approval of the project was confirmed in April, and action for implementation was immediately taken.

Materials. During the planning period twelve major lists of books were prepared by the Supervisor of Library Services with the assistance of librarians and elementary subject area supervisors. Sources were the Supplementary Book List of the Cincinnati Public Schools and standard professional reviewing tools such as the Children's Catalog. The goal set for every center was a minimum of 3,500 books, with ten schools having the largest enrollments receiving more. A total of 143,000 books were obtained. Subscriptions were placed for 33 periodicals for each project school. In addition, hundreds of audio-visual and programmed learning materials were reviewed by the staff of the Visual Aids Exchange and assisting teachers. Orders were placed for 17,000 audio-visual and 6,000 programmed learning materials. Specifications for the processing and cataloging of all materials were written in the Office of Library Services and supplied to the processor who submitted the lowest bid.

Facilities. Prior to project approval, selection of rooms for the centers was made by the Director of Elementary Schools and the Department of Business Administration, keeping in mind such criteria as central location and possibilities for expansion. Also, design services were contracted for and plans drawn. Bids for remodeling and construction were let as soon as the project was approved, and work began in July.

Equipment bids were also taken. These were based on specifications used in establishing libraries under the Compensatory Education program, but revised in terms of resource center needs. Supplies, specified by the Supervisor of Library Services, were also ordered immediately on approval of the project.

Personnel. Professional and clerical assistance for administration of the project was requisitioned as needed for the Office of Library Services and the Visual Aids Exchange. Seven professional and eleven clerical employees were hired for these offices. Additional personnel was pro-rated over several projects for business and personnel administration and for evaluation. Because of the necessarily slow progress in the remodeling operation and the receipt of processed materials, the complete authorized staff could not be employed before the project expiration date of August 31, 1966.

The Division of Staff Personnel was charged with securing staff for the new centers. The goal was to employ either librarians with elementary school experience or successful teachers who were willing to commit themselves to library science training in four basic areas: school library organization and management, selection of books and other instructional media, reference and bibliography, cataloging and classification.

Progress. Because of the time involved in remodeling and obtaining materials, the 1966-67 school year was well underway before the resource centers began operating in many schools. The process of converting available space, processing and cataloging books, and checking in programmed and audio-visual materials is extremely time consuming. The librarians gave full time to the operation over a period of several months.

It has also been necessary to devote time to in-service training of these resource center librarians. Training in basic library procedures and the use of audio-visual and programmed materials is being provided on two afternoons a week. Most centers will be in full scale operation early in 1967.

Evaluation Procedures and Results

Because of the time necessary to implement the Educational Resource Centers project, no extensive evaluation of the first year's efforts is possible. Since the project was dependent upon special materials that had to be ordered and facilities that had to be modified, the few months that remained after project approval were barely enough to take the initial steps toward implementation.

This difficulty was anticipated at the time the project was planned. The initial strategy for evaluating the project called for the establishment of baseline data through a teacher survey, a pupil survey, and a library skills test. In addition, after the project was past the implementation stage, records were to be kept of the use of books and materials.

Only a limited number of these data are available at this time. This evaluation will report such baseline data and attempt further to determine whether the project services, as they are now being implemented, answer a definite need of target pupils and teachers. Obviously no real evaluation of the project's success in attaining its objectives is possible. Appraisal of the effect of the resource centers on the few students who might have been served during the summer months would be rather meaningless.

At the conclusion of the next project year, a comparison will be made with such baseline data as are now available. Since the resource centers are to be included as one component of the Elementary School Remediation and Enrichment project, the effect of the total project services on pupil achievement will be an important phase of this future evaluation. Another important basis for evaluation will be detailed records of the use of the centers after they begin full-scale operation. Also, as soon as the centers are in complete operation, a library skills test will be administered. This test will be repeated at the close of the year to measure pupil gains in their ability to profit from library use.

The objectives of this project are numerous and somewhat elusive of measurement. For this reason, they are grouped in this report into three categories: procedural; long range, pupil centered; and long range, library centered. The focus of the evaluation will be reporting available baseline data and assessing the suitability of the project services to pupil needs.

Procedural Objectives. Four of the project objectives are procedural in nature. These are concerned with augmenting the supply of materials for other projects, supplying materials for individualized instruction, furnishing a place for independent study, and providing a setting for practice in self discipline and social responsibility.

Riessman, among others, has underlined the importance of helping the disadvantaged children participate actively in the learning situation by providing clues that are "salient and concrete."[1] Such clues are woefully lacking in traditional middle-class-oriented learning materials. More appropriate materials are needed to enable other Education Act efforts, such as the Elementary School Remediation and Enrichment project, to attain maximum effectiveness. The individualized instruction that the remediation and enrichment project makes possible can be made much more meaningful in this way.

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[1] Frank Riessman. The Culturally Deprived Child. New York: Harper and Row Publishers. 1962, p. 131.

Just as obvious is the need for a place to study. Most disadvantaged youngsters have no suitable study area in their homes. If their educational growth is not to be restricted to the classroom, they must be provided an adequate place to engage in independent study. From this study they might also derive other gains such as improved self-discipline and sense of social responsibility. Allport has emphasized the effect of membership in a culture class, with its particular prejudices, on the molding of self conscience and conduct.[2] To the extent that one's philosophy views such aspects of personal development as a concern of the school, this aim of providing an appropriate setting seems a worthy project objective.

Of the two kinds of provisions--materials and setting--teachers seem to feel that a suitable place for learning is more important. This fact is evidenced by their replies to pertinent items of the Teacher Survey. Table 1 shows the mean ratings given by primary target, secondary target and control teachers to five items on the June survey related to this category of objectives. For two of these the ratings are consistently below the theoretical mid-point of the scale (4.00) as well as below the mean for the five items listed and the mean for all 48 items on the survey. These two low-rated items are "Time and place for pupils to study" and "Adequacy of school library." Teachers seem more concerned, then, about a place for students to learn that about materials and supplies they might need.

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[2] Gordon W. Allport. Becoming. New Haven: Yale University Press, 1955. p.99.

Table 1. Mean Ratings by Teachers on the June Teacher Survey of Five Items Related to Procedural Objectives.

	ITEMS	PT N=337	ST N=495	C N= 65
7.	Books available to my class	5.01	4.61	4.92
8.	Adequacy of school library	3.85	3.23	3.72
10.	Availability of professional reading matter	4.80	4.34	4.20
13.	Time and place for pupils to study	3.54	3.19	3.75
48.	Adequacy of instructional media	4.98	4.77	5.04
	MEAN	4.44	4.03	4.33

Long-Range Objectives, Pupil-Centered. Four project objectives concerned matters directly related to the performance of pupils. These involve improving reading skills, satisfying children's curiosity, stimulating creative thinking and involving parents in the education of their children.

These objectives seem to correspond to needs of disadvantaged children that are often discussed in the literature. Reissman notes that culturally deprived children often take on attitudes and fears that get in the way of learning, but that once this fear of failure is overcome they show "perseverance and dogged problem solving."[3]

The need to improve the reading skills of target pupils is evident in the scores on the achievement tests administered for the evaluation of the Education Act program. Median scores on the subtests concerned with reading, word meaning, and paragraph meaning were rather consistently below the battery median score at all grade levels with deviations from the norm ranging from seven months at grade two to two years at grade six. Such deficiency in reading ability is a commonly recognized characteristic of culturally deprived pupils.

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[3] Frank Riessman. Op. cit., p. 86.

Seven concepts related to this phase of project services were included as items on the Teacher Survey. The teacher ratings for primary target, secondary target and control schools are given in Table 2.

Table 2. Mean Ratings by Teachers on June Teacher Survey of Seven Items Related to Pupil-Centered Long-Range Objectives.

ITEMS	PT N=337	ST N=495	C N= 65
2. Parent involvement	3.23	2.83	3.17
3. Motivation of my pupils	4.45	4.06	4.66
17. Parent participation in school	2.93	2.54	3.02
21. Supportive attitude of parents	3.71	3.28	3.84
22. Behavior standards of my pupils	4.05	3.69	3.98
23. Pupil discipline	3.89	3.68	3.85
38. Achievement of my pupils	4.00	3.72	4.12
MEAN	3.75	3.40	3.81

The mean ratings for the seven items on long-range objectives are lower for each group of teachers than for the procedural items discussed above. It would seem that the teachers feel a greater need to improve important aspects of pupil and parent behavior than to work toward the more easily attained procedural goals. This seems consistent with the teacher's role, which is concerned far more with influencing behavior than with making provisions.

Comparisons can be made also between these target school teachers' ratings and those given by non-target teachers throughout the city. When these ratings on the seven behavioral items are compared, all non-target ratings are seen to be considerably higher. This difference, averaging over a full unit on a seven-point scale, is much greater for the behavioral than for the procedural items. These comparisons point to the feeling that teachers evidently have concerning the importance of these goals for the resource centers project.

Long-Range Objectives, Library-Centered. The remaining four project objectives are concerned with goals related directly to the services offered by school libraries. These objectives involve the use of library materials, the selection and evaluation of information sources, appraisal of books and other educational media and encouragement of the library habit.

It is obvious that the fundamental concern of each of these objectives is the educational welfare of pupils. As Bruner observes, "The first object of any act of learning, beyond the pleasure it may give, is that it must serve us in the future. Learning should not only take us somewhere, it should allow us later to go further more easily."[4] It is this kind of educational opportunity that the library-centered aspects of this project are intended to provide.

Although these objectives are necessarily related to other project goals, they are treated separately because of their immediate connection to project services. These are the characteristics for which change will be measured in the coming year through the use of a library skills test. At the present time, only two questions from the survey administered to pupils provide information pertinent to these objectives. On the Student Survey administered in May, pupils were asked, "Do you read books from the library?" and "Do you read more than is required by your school work?" There was little difference among percentages of replies by target and control pupils to these questions. About 85 per cent of the pupils in each type of school said that they did read library books, while the percentage answering the second question affirmatively was about 59 per cent. The item on the library books rates in the upper half of the survey in per cent of affirmative responses. The question about extra reading, however, ranks second from the bottom. This seems to suggest that pupils' use of the library has been limited to required reading.

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[4] Jerome S. Bruner. The Process of Education. Cambridge: Harvard University Press, 1960, p. 17.

Recommendations

On the basis of the limited evidence available for evaluating the Resource Centers project, the following recommendations are made:

1. That an effort be made to reinforce the connection between the resource centers and the other project services under the Elementary School Remediation and Enrichment project. Resource teachers, especially, should be encouraged to make optimal use of the centers. Special emphasis should be placed on increasing the reading skill of project pupils, thereby enhancing their chances for success in all phases of the project.

2. That a special attempt be made cooperatively by resource teachers and librarians to stimulate the creative use of the centers by pupils, encouraging independent reading and leaving time for such reading beyond the requirements of the school program.

3. That careful, accurate records be kept of the use of the centers to facilitate project evaluation in the coming year. Although this is a purely mechanical operation, it is especially important in that the actual use made of these facilities provides a more valid basis for evaluation than any kind of rating scale or survey.

4. That the objectives of the project be modified to bring into sharper focus the goals for which the project was intended. These goals need to be stated in terms of specific anticipated outcomes. The evaluation of their attainment in the coming year will be especially important in deciding refinements and future directions of project services.

Summary and Conclusions

The Educational Resource Centers project was put into operation toward the end of the 1965-66 school year as a means of providing essential support to the other Education Act projects in Cincinnati. Resource centers were planned as new facilities in 25 target elementary schools and improvement was scheduled for the seven remaining schools.

The amount of time required for initial implementation of the project made it impossible to conduct meaningful evaluation in terms of attainment of objectives. Rather, this report has aimed at presenting available baseline data and examining the appropriateness of first attempts to meet the need for resource center facilities.

The directions planned for the project do seem to answer a definite need. A place for independent study, stimulation to use such facilities, and eventual improvement in the general education of project pupils appear to be worthy goals that teachers see as important. To design these goals in terms of specific anticipated outcomes and to maintain accurate records of the uses made of the resource centers are all essential to a good evaluation for the coming year. It is also recommended that close attention be paid to relating the resource centers to other phases of Education Act services, and that special emphasis be placed on the encouragement of independent reading.

ELEMENTARY REMEDIATION AND ENRICHMENT SUMMER SCHOOL

Introduction

Target school pupils served by the Elementary Remediation and Enrichment project received a considerable amount of direct services in the last months of the 1965-66 school year. The need to provide these special services for the disadvantaged pupils has been well documented in research literature:

> "Present school practices do not succeed in overcoming the initial difference between culturally advantaged and culturally disadvantaged children. Instead, what start as small measurable differences in the first grade become larger each year. By the end of the sixth year of school, there is a cumulative deficit in the school achievement of the culturally disadvantaged children which shows up most clearly in the tool subjects of reading and arithmetic. But, even in the measures of general intelligence many of these children appear to decline during the period of grade 1 to grade 6. It is this cumulative deficit which must be reversed as early as possible in the culturally deprived child's school career."[1]

The pupils in the target schools, because of the services, derived educational benefits to help them overcome some of the obstacles to academic learning inherent in their educational backgrounds.

To return these pupils to their regular environment without the educational stimulation offered by an effective school program for the summer months, is to risk losing any of the gains that the regular school project has achieved. Providing a summer school program for children from disadvantaged backgrounds deals with the problem on two fronts. First, it provides remediation and enrichment activities on a more individualized basis than is usually available in the regular school year. Second, it combats the "summer loss" in achievement that is more pronounced among pupils from disadvantaged backgrounds.[2]

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[1] Bloom, Benjamin, et al, Compensatory Education for Cultural Deprivation, Holt, Rinehart, and Winston, Inc., New York, 1965.

[2] Hetzel, Suzanne and Jacobs, James, "A Comparison of Achievement Gains of Advantaged and Disadvantaged Pupils Through the Summer Months," Journal of Instructional Research and Program Development, Cincinnati Public Schools, October, 1965, Vol. 1, No. 1, pp. 19-29.

The experience of the schools in the Great Cities Program for School Improvement (Cleveland, Detroit, Milwaukee, Philadelphia, Pittsburgh, and St. Louis) also supports the provision of summer school. "Summer school enrichment, particularly in reading and arithmetic, tends to affect the academic recession which generally occurs during the typical inner city summer."[3]

For these reasons the elementary summer school project was planned to extend services. The major emphasis continued to be remediation and enrichment through small group instruction. Services offered in the project included instruction in language, reading and arithmetic, talent and skills development, and art and music enrichment. Eligible pupils were those who had completed grades one through six in the target schools. The particular services that any one group of pupils received varied according to their grade level and the specific summer school component in which they were enrolled.

Objectives

The objectives of the project are as follows:

1. Provide more individual help for pupils with special problems than is now possible in the classes in the regular school year.
2. Provide a program designed to help pupils strengthen the reading, arithmetic, language, and study skills and to stimulate within each pupil a desire for improvement.
3. Deepen insights and extend interests of pupils through broad experiences and an enriched environment.
4. Develop skills necessary for pupils to work more effectively in the regular school program.

Project Narrative

Inauguration. The Elementary Summer School project, offering remedial and enrichment instruction to educationally deprived pupils, was approved in March, 1966.

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[3] Research Council of the Great Cities Program for School Improvement, "Promising Practices from the Projects for the Culturally Deprived," 228 North LaSalle Street, Chicago, April, 1964.

The project provided pupils in grades one through four with help in the improvement of reading, language development, oral and written expression, arithmetic as well as enrichment activities and field trips (164 classes) and remedial reading (29 classes). For pupils of grades five and six the project provided remedial instruction in reading (20 classes) and arithmetic (13 classes); instruction in the basic skills for sixth grade pupils (10 classes); enrichment experiences in science and social studies (12 classes). An enrichment program in art, music, and physical education was provided for all pupils of grades five and six. Field trips were planned and extensive use of the rich resources of the city of Cincinnati and the area closely surrounding the city was a part of the program. The project also included psychological, visiting teacher, and librarian services.

On March 15 an assistant project director was assigned to administer the project. The thirty primary and secondary target elementary schools identified as target schools under the Education Act housed the self-contained classes grades one through four, and six center schools were established for pupils of grades five and six. Classes for each school and center schools were scheduled and recruitment procedures were determined. Flip charts and application cards were sent to each principal of the target schools giving the needed information as to organization, content of program, and location of classes. Arrangements were made for transportation of pupils in grades five and six and a snack lunch for pupils of grades one through four.

All classes began June 20, Monday through Friday, 8:30 a.m. - 12:30 p.m. for six weeks.

Project Participants. Two hundred and sixty-three teachers, nineteen coordinators, and three supervisors provided the remedial and enrichment instruction for the project. Orientation sessions were held with subject supervisors prior to the opening of summer school. Two hundred and fourteen teacher-aides were provided to assist the regular teacher in non-professional activities. Orientation sessions were held with the assistant director. Seven psychologists and six visiting teachers completed the total staff. Enrollment was opened to thirty public elementary schools and fourteen non-public elementary schools.

A total of 4,673 pupils completed the elementary enrollment. An additional 545 pupils who had enrolled dropped out of the project before completion. Intense summer heat was believed to be the major factor involved in the dropouts.

Materials and Activities. A substantial part of the budget for the Elementary Remediation and Enrichment Summer School project was allotted for the purchase of special materials and supplies that would be specially suited to disadvantaged children. Materials used successfully in the self-contained classes grades one through four included multi-ethnic readers, supplementary sets of paperbacks, practice material, flash word cards, rolling readers, manipulative materials (reading and arithmetic), picture dictionaries, games, puzzles, pictures, films, and filmstrips.

Teachers of Remedial Reading grades five and six found success with textbooks and supplementary books of high interest, low vocabulary at varying levels, multi-ethnic books, paperback copies of short stories, phonetic workbooks, practice materials, SRA Reading Laboratories, Readers Digest Skill Builders, single copies of library books, word flash cards, dictionaries, and filmstrips.

The Remedial Arithmetic program included textbooks at varying levels, practice materials, workbooks, programed materials, manipulative materials, such as arithmetic sticks, puzzles, flash cards, flannel boards, charts, and filmstrips.

Materials used successfully in the Talent Development Classes (enrichment science and social studies) included textbooks in specialized areas, science kits, math workbooks, dictionaries, atlases, maps, encyclopedias, manipulative materials, science equipment, pupil reference materials, and films.

Skills Development Basic program provided help through reading and arithmetic textbooks, practice materials, enrichment programed individual progress workbooks, language workbook texts, E.D.L. Study Skills Laboratory, single copies of library books, dictionaries, maps, encyclopedias, manipulative materials, films, and filmstrips.

Each class participated in a number of enrichment activities and field trips. Trips available for pupils of grades one through four were as follows: pet shops, Greater Cincinnati Airport, bakeries, parks, museums, industries, tour of Cincinnati, radio stations, libraries, Playhouse in the Park, farm and garden centers.

The enrichment program for grades five and six was under the leadership of the art and music teachers who planned a series of three areas of experiences in order to provide for exposure to culture within the Cincinnati community, and to relate the various arts in meaningful ways through direct confrontation.

Area I. Art and Music in Drama

Activity - Children had the experience of seeing a stage set, lighting, and costuming of a theater. Tour of Playhouse in the Park was arranged. Children had the experience of staging an opera with the use of scenery, costuming, singing, instruments, and action at the Murray Seasongood Pavilion, Eden Park.

Area II. Art and Music Past and Present

Activity - Children were taken on a tour of the Art Museum, where a time line from caveman to contemporary art and music was illustrated. Artifacts, art objects, and musical instruments were viewed. Another tour included observation in and around Eden Park and Mt. Adams to enjoy the old world and new world flavor as an attraction in the city. Correlation was made of art and music.

Area III. Art and Music in Cincinnati

Activity - A tour through Taft Museum with a concert was provided. A visitation to Flair House Gallery provided opportunity to see a contemporary city gallery facility and to understand its function to the artist and the public of today.

An afternoon and evening opera performance was scheduled for each center for pupils who wished to participate.

Each center school provided an Open Studio under the direction of the art and music teachers. Scheduling of pupils into the Open Studio was based on an Interest Question given to each pupil of grades five and six. The studio provided opportunities for developing interest projects.

Parent involvement made possible the establishment of relationships between parents and teachers through daily contacts, planned parent-teacher conferences, visitation in the classes of their child, and parent involvement in the program as helpers on excursions.

Evaluation Procedures and Results

In the introduction of this report, reference was made to the importance of summer school programs of enrichment and remediation in combating academic "summer loss" and the cumulative academic deficit of disadvantaged children. To determine the effectiveness of the programs in a single summer school session is difficult. To be sure, the academic skills in reading and arithmetic can be measured and analyzed for gains, but the lasting effects of the enrichment activities, and whether the obtained academic skills are maintained, can only be determined by longitudinal study. The first three objectives are procedural. They implicitly assume that their fulfillment will result in pupil behavioral changes toward desirable but unspecified goals. They deal with the provision of services through techniques that have been considered effective in numerous programs for the disadvantaged. The Great Cities Program, Higher Horizons Program, the ABCD Program (Boston), as well as previous compensatory, remedial, and talent development programs, carried out by the Cincinnati Public Schools, are but samples of programs that used similar techniques and procedures. Evaluation of these three objectives will indicate the degree to which each objective was carried out. It is assumed that successful fulfillment of these procedures has an effect on the behavior of pupils over a longer period of time than within the summer school period.

The fourth objective treats changes in the academic skills of pupils. The various components of the project each have their particular thrusts; however, in general, they contain the purpose of improved reading, language, or arithmetic skill. Measurement of various academic skills was made in May, 1966 and again at the end of the summer school session in July. The former was used as the baseline measure against which to compare July (end of session) achievement. The type of comparison used to evaluate the extent to which academic skills were increased depends on the assumptions made relative to expected achievement without the benefit of the summer school program. If summer school project pupils could be compared with a similarly constituted group who did not enroll in the program, the problem of determining achievement expectancy would not exist. Such, however, was not the case.

At least three alternate methods of determining expectancy are possible. First, one might assume that in the absence of formal instruction, achievement would remain essentially unchanged. Under this assumption, one need only demonstrate a significant increase from pre-test to post-test after correction is made for achievement from pre-test to the end of the regular school year. A second alternative is to reason that in the absence of formal instruction, student achievement will deteriorate in their impoverished environment. Some studies on summer loss in achievement bear out this hypothesis. If one assumes a significant loss in achievement will occur as a result of no formal instruction, one may argue the project is advantageous if achievement from pre- to post-test remains the same. This approach was not used because reliable estimates of achievement loss are not available. A third alternative is to ask whether ESEA summer school pupils achieved more per unit time than they normally would have in regular day school. This approach requires an estimate of how much is "normally" learned in six weeks of regular day school and the six week gains in summer school.

Objective 1: Provide More Individual Help for Pupils with Special Problems Than Is Now Possible in the Classes in the Regular School Year.

The provisions made to meet this objective were to reduce the number of pupils per teacher and provide other aid to further individualize instruction. Teacher aides were used extensively in the project and supportive psychological services and visiting teacher services gave further aid to children. The assumption is made, of course, that these provisions will indeed help pupils with "special problems." Since these special problems are of an unspecified nature, one must simply believe that these provisions have intrinsic worth.

Table 1 shows the decrease in class size in summer school as compared to the regular school year.

Table 1. Comparison of Elementary Target School Class Size Between the Regular School Year and ESEA Elementary Summer School.

	Regular School Year 1965-66	Elementary Summer School (ESEA)	Reduction in Class Size
Grades 1 - 4			
Enrollment	32,505	3,861	
Teachers	1,049	164	
Teacher Aides	-	160	
Mean Class Size	30.9	23.5	7.4 (24%)
Grades* 5 - 6			
Enrollment	12,896	1,357	
Teachers	408	56	
Teacher Aides	-	54	
Mean Class Size	31.5	24.2	7.3 (24%)

*Includes some grade 4-5 combinations.

Table 1 shows the pupil-teacher ratio for the ESEA elementary summer school program to have been reduced by 24% in comparison to the ratio in the regular school year. Pupils in each of the components of the project were selected on the basis of their special need for additional help or remediation. The reduction in class size and selection of pupils into the appropriate components according to their special academic needs effects a focusing and intensity of help that cannot be accomplished in the regular school year.

Table 1 also shows 214 teacher aides were assigned to the project. Their duties of conducting non-professional activities, working with small groups and individuals, relieving teachers of routine tasks, and chaperoning field trips brought about obvious increases in time that the teacher could spend with individual pupils.

Table 2 presents the supportive services available in the project compared to the regular school year.

Table 2. Supportive Services Available to ESEA Elementary Summer School Pupils Compared to Those Available in the Same School During the Regular School Year.

	Regular 1965-66 Grades 1-6	Pupils per Unit	Elementary ESEA Summer School 1966	Pupils per Unit	Difference in Pupils per Unit
Enrollment Gr. 1-6	45,401	-	5,218	-	-
Psychologists	14	3,243	7	745	2,498 (77%)
Visiting Teachers	24	1,892	6	870	1,022 (54%)

Note: In addition, there were 29 Remedial Reading Teachers assigned to the 30 project schools that contained classes in grades 1-4.

It is presumed that the additional services provided by the project brought about greater individualization of instruction. The number of psychologists per pupil was increased by more than 77 per cent. This service has two potentials. First, the reduced load per psychologist provided more time to spend with the special problems of individual children, allowing more intensive service and more immediate follow-up with teachers. Second, the additional case work started during the summer school can be continued through the regular school session without loss in effectiveness because of the greater continuity.

The additional visiting teacher services provided much the same type of assistance as the additional psychological services. Drawing upon the visiting teachers, social case work techniques allowed greater follow-up of individual cases already known to the schools prior to summer sessions. The reduced load of pupils per visiting teacher allowed greater intensity of services. The continuity of services can be carried over to the regular school session to the benefit of the pupils who were in the summer school project.

Objective 2: Provide a Program Designed to Help Pupils Strengthen the Reading, Arithmetic, Language, and Study Skills and to Stimulate Within Each Pupil a Desire for Improvement

This objective is stated in procedural terms of providing "a program designed to help pupils..." but also contains phrases referring to strengthening academic skills and stimulating pupils to want to improve. Evaluation of pupil changes in academic skills will be discussed in objective 4.

This project, as well as the entire ESEA Title I Program, draws upon techniques and procedures that have been effective in other school programs for the disadvantaged. These programs include the Great Cities Program for School Improvement which was mentioned earlier. The Higher Horizons Program, although for Junior High School pupils, emphasized the importance of enrichment activities. The enrichment activities are a vital part of this project. The Banneker Program in St. Louis worked at pupil motivation by closer parent, community, and school ties. This summer school project is an important factor in maintaining this relationship over the summer months and thereby supports an overall ESEA Title I objective of strengthening the parent-school relationship. Previous compensatory, remedial, and talent development programs carried out by the Cincinnati Public Schools also used similar techniques and procedures.

The goal "...to stimulate within each pupil a desire for improvement," is also a part of this second objective. One may consider lower attrition rates as reflecting desire for improvement. To this end, comparison was made of the retention rates of fifth and sixth graders in this project and those enrolled in similar components in the regular summer school program in 1965. It should be borne in mind that both summer programs were not compulsory. Under this project, however, much more encouragement was given as evidenced in table 3 by the higher enrollments in 1966.

Table 3. Comparison of Summer School Retention Rates Among Fifth and Sixth Grade Pupils in 1965 and (ESEA) 1966.

Summer School Component	1965 (Pre-ESEA) No. Enrolled	No. Completed	%	1966 (ESEA) No. Enrolled	No. Completed	%
Remedial Reading	646	576	89%	897	823	92%
Remedial Arithmetic	363	317	87	499	435	87
Skills Basic	288	250	87	485	422	87
Talent Development	264	231	88	418	371	89

Note: Comparisons for grades 1-4 could not be made because such classes did not exist in 1965 summer school. In 1966, there were 3861 enrolled, 3493 or 91% completed.

Table 3 shows that the percentages of pupils completing the various summer school components were about the same for the two years. A slight increase is noted in remedial reading and talent development. Considering the more highly selective nature of 1965 population over the 1966 population, similar retention rates may be viewed favorably to the ESEA project. Many ESEA pupils attended summer school because of strong encouragement. In contrast, 1965 pupils enrolled mainly because they wanted to.

Objective 3: Deepen Insights and Extend Interests of Pupils Through Broad Experiences and an Enriched Environment

This objective deals with the provision of enrichment experiences. Extensive enrichment activities were carried out by each summer school center. These included excursions to centers of commercial and cultural interest by all grade levels. In addition, fifth and sixth grade classes were offered individual participation in art and/or music through the "open studio;" and participation in, or observation of an opera performance.

There were 164 classes in grade 1 through 4 located in 30 centers. The extent and nature of these enrichment activities are shown in table 4.

Table 4 indicates that 393 classroom excursions of 32 types were taken by the 164 classes. This would be an average of two to three excursions by each classroom. It is likely that this is an underestimate as some teachers may not have considered visits into the immediate community as excursions.

Table 4. Summary of Excursions Made by First through Fourth Grade Classes Enrolled in ESEA Summer School.

Type of Excursions	Number of Classrooms	Type of Excursions	Number of Classrooms
Public Libraries	48	Soft Drink Bottling Works	18
Airports	35	Radio-TV Stations	15
Farms	35	Nature Walk (various parks)	13
Natural History Museum	27	Garden Visit	13
Water Works	23	Community Hike	12
Bakeries	21	Krohn Greenhouse	12
Daily Newspaper	19	Firehouses	10
Pet Shops	19	Miscellaneous (17 different places)	73
		TOTAL	393

Following a well organized enrichment program in art and music each pupil in grades 5 and 6 had the opportunity to take two field trips. (See narrative above for description of this program, pages 5 and 6.)

Summary reports from four of the six centers indicate that from 65 to 85 per cent of the grade 5 and 6 pupils were involved in each of the three excursions provided by the centers. This indicates all pupils participated in two excursions and some pupils engaged in all three.

The open studio was an innovation that allowed pupils attending any of the fifth and sixth grade classes to be scheduled for individual or small group activities in art and music. Each school center scheduled this time in the most efficient way for the particular school.

Participation in the "open studio" averaged from 15 to 20 pupils each day. In the music area of the "open studio" more pupils could be accommodated as modules of 45 minutes were used, allowing up to three small groups to work at different times. As many as 48 pupils were reported in one day's activity in the music area.

Each summer school center with fifth and sixth grade classes gave an opera performance involving pupils in the staging of an opera that included the use of scenery, costuming, singing, and participation. Pupils from each center were involved in an afternoon or evening opera performance.

Objective 4: Develop Skills Necessary for Pupils to Work More Effectively in the Regular School Program

Standardized achievement test results are used to evaluate this objective. Pre-testing was completed in late May on all pupils in the target schools except sixth graders who were tested in February. Post-testing was accomplished during the last week of summer school which began June 20 and ended six weeks later. Two basic questions were posed in the data analysis. First, was there a significant gain from pre-test to post-test? Second, how does the summer gain compare to that normally achieved in an equivalent six week period during the regular school year? Results from all second and third graders were used in the analysis whereas random stratified samples of 50 pupils each were taken from the fourth grade and from the special sections of fifth grade pupils attending Talent Development, Skills Basic, Remedial Reading, and Remedial Arithmetic classes. Each sample contained an equal number of pupils in each classroom.

The evaluation rationale inferred by the first question rests on the assumption that no achievement gain would be expected if the youngsters in this project did not attend summer school. This represents a conservative assumption since there is evidence to believe that an achievement decay actually occurs in the absence of formal instruction. To test this hypothesis the t-test was employed to test for significance of difference of means. Since identical pupils were involved correction had to be made for correlation between pre- and post-test. Further, the statistical tests were one-tail tests since it is not reasonable to assume that additional instruction would detract from achievement. The raw score pre- and post-test means for second, third, and fourth grade pupils, all of whom attended self-contained classes, are shown in table 5.

Table 5. Summary of Standardized Achievement Test Results Obtained from Second, Third, and Fourth Grade Pupils Attending Self-Contained Summer School Classes for a Period of Six Weeks.

	N	Pre-Test Mean	Post-Test Mean	Mean Difference	Difference Significant?*	Months of Gain**
Grade 2						
Metropolitan Primary I, Form A						
Word Knowledge	754	27.39	28.96	1.57	Yes	2
Word Discrimination	745	26.71	27.63	.92	Yes	1
Reading	739	28.86	31.34	2.48	Yes	2
Grade 3						
Stanford Primary II, Form X						
Word Meaning	685	15.39	16.80	1.41	Yes	1
Paragraph Meaning	680	24.77	26.82	2.05	Yes	1
Arithmetic Computation	677	24.59	25.23	.64	Yes	1
Arithmetic Concepts	660	16.49	17.47	.98	Yes	1
Grade 4						
Stanford Intermediate, Form X						
Word Meaning	50	9.36	10.98	1.62	Yes	3
Paragraph Meaning	50	17.22	18.52	1.19	Yes	1
Arithmetic Computation	50	12.64	12.84	.20	No	0
Arithmetic Concepts	50	9.14	8.82	-.32	No	0
Arithmetic Application	50	9.86	10.90	1.04	Yes	1

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*Difference tested at 5% risk level with one-tailed t-test.

**These estimates are rounded to nearest whole number.

Inspection of table 5 reveals that ten of the twelve statistical tests showed a significant difference from pre-test to post-test. Only the arithmetic computation and the arithmetic concepts subtests given in grade 4 showed no significant gain. The largest gains seem to have occurred in the general area of reading rather than arithmetic. This probably reflects the greater emphasis on reading in these grades as compared to arithmetic.

Fifth and sixth grade pupils attending summer school did so by enrolling in programs which had particular emphases. Four such components were operated: Remedial Reading; Remedial Arithmetic; Talent Development; and Skills Basic. Only fifth grade pupils were used in the analysis because sixth grade pupils were pre-tested in February rather than late May; thus, it would be impossible to cancel out the effects of achievement from February to May. There is little reason to believe, however, that the effectiveness of these classes would be any different for sixth graders than it is for fifth graders. Random samples of 50 pupils in each of the four components were selected equally from each class in operation. Results of the pre- and post-test were analyzed in a manner similar to that described for the second, third, and fourth grade results. A summary of these results is shown in table 6.

The subtests reported under each component in table 6 represent the particular area of emphasis appropriate to that program. Thus, it is on these subtests that the greatest amount of growth is to be expected. In general, it is seen that mean scores on the post-test were significantly higher than those on the pre-test. Of the twelve comparisons, only two showed non-significant differences, one in science under Talent Development and the second in language under the Skills Basic component. The lack of significant increase in science may be partially due to the content validity of the test. Further, the areas of emphasis in the Talent Development program are very broad and include arithmetic, reading, science, and social studies.

Table 6. Summary of Stanford Achievement Test Results, Intermediate II, Form X, for Fifth Grade Pupils in Various Summer School Components.

SUMMER SCHOOL COMPONENT Stanford Subtest	N	Pre-Test Raw Score Mean	Post-Test Raw Score Mean	Mean Difference	Difference Significant?	Months of Gain
REMEDIAL READING						
Word Meaning	50	11.30	16.05	4.75	Yes	8
Paragraph Meaning	50	16.94	17.94	1.00	Yes	1
REMEDIAL ARITHMETIC						
Arithmetic Computation	50	9.18	11.90	2.72	Yes	6
Arithmetic Concepts	50	7.08	7.92	.84	Yes	3
Arithmetic Application	50	10.26	10.88	.62	Yes	2
TALENT DEVELOPMENT						
Arithmetic Computation	26	11.85	14.08	2.23	Yes	4
Arithmetic Concepts	26	10.42	11.85	1.43	Yes	4
Arithmetic Application	26	15.08	16.12	1.04	Yes	2
Word Meaning	40	20.08	23.55	3.47	Yes	7
Paragraph Meaning	40	28.60	32.20	3.60	Yes	4
Science	50	26.70	27.30	.60	No	0
Social Studies	50	32.07	33.02	.95	Yes	1
SKILLS BASIC						
Spelling	50	23.50	27.56	4.06	Yes	5
Language	50	68.66	68.40	-.26	No	0

One would not expect equal gains to be made in all these areas.

One might judge the greatest overall success to be in the Talent Development component since significant gains were noted in five of the six subtests. Since the caliber of student for whom this component was designed was slightly higher than in the other components, this finding is expected.

Remedial Reading showed significant gains in both word meaning (8 months) and paragraph meaning (1 month), although the greatest gain was in the former. Remedial Arithmetic gains were apparent in all three subtests ranging from six months in arithmetic computation to two months in arithmetic application.

The Skills Basic component emphasized spelling and language. While spelling achievement increased significantly (5 months), language remained essentially the same. It is interesting to note that, while achievement in language was poorest among all subtests as shown by overall target school results, it is the least responsive to formal instruction. It is apparent that our techniques of teaching language are not effective with disadvantaged children. Perhaps the curriculum is inappropriate to begin with.

In addition to the subtests presented in table 6, other subtests were given in each of the components to see what did happen in subject areas that were not emphasized in the curriculum. For example, arithmetic tests also were given to pupils in the Remedial Reading program. It was hypothesized that achievement in non-emphasized areas would remain essentially the same. If this occurred, observed differences in the target subject would take on that much more significance. The findings supported this hypothesis. In other words, achievement in other areas generally was the same as it was previous to summer school.

Recommendations

1. Summer school should be continued in the target areas as it effectively combats summer loss and the cumulative academic deficit in learning among disadvantaged pupils. It also helps maintain school-community relationships during the summer, influencing pupil's motivation and level of aspiration.

2. Special evaluation methods and procedures should be designed for the Talent Development program. Standardized social studies and science tests do not seem appropriate.

3. The extensive use of excursions and field trips may soon cause duplication of experiences. Careful planning and execution of experiences are needed to make them meaningful.

4. Pupil selection procedures for the various components seem satisfactory and should be continued.

5. Evaluation procedures need to involve the services provided by visiting teachers and school psychologists.

6. The shortage of supplies at the beginning of the summer session is noted; provisions need to be made so that similar shortages do not occur in the future.

Summary and Conclusions

The four major objectives of this project were attained with reasonable success. The provision of more individual help for pupils is attested to by the reduction in teacher-pupil ratio by approximately one quarter of the ratio for the regular school year. The extensive use of teacher aides, visiting teachers, and school psychologist services, as well as librarians, physical education and remedial reading teachers, gave further opportunities for more individualized help.

The overall summer school project was designed with methods and techniques similar to previous Cincinnati Public School programs and programs used by other major city systems for the disadvantaged pupil. The success of the project in stimulating in each pupil the desire to improve was measured in the percentage of pupils completing the summer session. The comparison to previous summer school programs in percentage of pupils completing the summer session was slightly higher, even though the number of pupils from the target areas of the city increased.

Extensive enrichment activities were carried out as a part of the project. On the average, each pupil participated in from two to three field trips or excursions related to the classroom activities. Pupils in grades 5 and 6 had the opportunity to work in the "open studio." This is an innovation that allowed pupils to schedule themselves for individual or group activities related to art and/or music.

In the area of academic skills, samples of testing results showed sufficient gains in most areas to indicate benefit from the program. Even in the areas showing no gain the question remains as to what would be the results if the pupils were not in summer school. Test results in the component for the fifth and sixth grade pupils showed considerable gains. With respect to reducing the greater amount of summer loss and the ever increasing cumulative deficit in academic skills expected of the disadvantaged pupil, the summer school project was successful.

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PARENT EDUCATION

Introduction

The Parent Education project is aimed at securing greater parental involvement in stimulating the physical, cultural, and intellectual growth of disadvantaged children. Primary goals of the project are to have the parent realize the importance of his role in rearing his children, to give him the understanding, education and belief in himself to do this and to bring him into closer contact with the school in the education of his children.

It is hoped that the parents' partnership with the school will improve their attitude toward education and thereby increase the child's motivation to learn. Parents who recognize their importance in the education of their children and understand the school's program gain self-assurance in helping their children with school work. Through step-by-step success, both parents and children set successively higher goals, thereby building an improved self-image.

While training parents to motivate their children and assist in their education, the project also attempts to encourage parents and parent figures to continue their own education under such programs as those of the Economic Opportunity Act, the Vocational Education Act, and the Manpower Development and Training Act. Such interest in self-improvement is likely to have a beneficial effect not only on parents and children, but also on the rest of the community.

The attempt to increase the involvement of parents in the education of their children and to encourage their own self-improvement is made chiefly through parent leaders chosen from each school community. The use of residents of each project school area was aimed at bridging the communication gap that often exists between home and school. Chief responsibilities of these leaders are to make home contacts with parents and to work with them in study-discussion meetings. These meetings are devoted to various topics that concern family life and education.

For a number of years Cincinnati has conducted a parent study-discussion program through the use of such lay leaders. School administrators report that parents who have participated in the program show a more cooperative attitude toward the school. Most of this study-discussion work, however, has been conducted in the suburban areas. The Parent Education program is intended to expand the very limited exploratory efforts in this vein among disadvantaged families.

Objectives

The project is designed to accomplish the following objectives:

1. To help educationally and culturally disadvantaged children by providing an opportunity for parents and parent figures to secure a better understanding of the physical, mental, social, and emotional needs of these children.
2. To help these children by aiding parents to understand and accept their role in the children's education.
3. To help these children by involving parents so that they may strengthen their contribution to the education of their children.
4. To achieve for disadvanataged children the kind of parental support and cooperation with the school which will enable them to make maximum progress in learning.
5. To raise the "self-image" of the family and to develop a core of families who will become good examples for children and who will set a tone for continuing education for themselves, their children and other members of the community.

Project Narrative

Inauguration. The Parent Education project was approved February 10, 1966. The many details of inaugurating the project were then begun. Among the first considerations were publicizing the project, establishing an office, requisitioning a secretary and interviewing applicants for the job of parent coordinator to assist the project director.

The parent coordinator began work on March 7 at a small, salvaged typewriter table with a borrowed chair in the project director's office. With the project director she completed plans for the project. Parent leaders and child care aides were employed, and training classes were scheduled for both of these groups.

On March 16, at a meeting of principals of primary and secondary target schools, the director interpreted the Parent Education project and requested the principals to answer an inventory questionnaire which included such questions as: "Does your school wish to participate in the project?" and "Do you have space for meetings in your school?" Instructions were given to principals for requisitioning the project and submitting an application for the job of parent leader from a person suitable to him, acceptable to the community, and interested in this employment. These two applications were submitted together.

On March 18, as the project was getting off the ground, the project director and parent coordinator met with the evaluation staff to plan the evaluation of the project. It was decided to continue the same plans in this Parent Education project as had been used in earlier parent study-discussion groups under lay leaders. Since 1958, statistical reports of the number of participants in these study-discussion groups had been maintained and annually tabulated. Annual evaluation meetings had been held to share program ideas, to appraise parents' reception of the parent study-discussion programs, and to make suggestions for future training programs. In addition to these procedures, it was decided to include other records, questionnaires, check lists, and eventually an attitude scale to evaluate the ESEA Parent Education project.

A classroom at Guilford school was converted to an office and equipped with a minimum of furnishings. Salvaged cartons were used for files, and an unused bookcase was moved in from the hall. With such basic equipment, the office opened on March 28.

Training for Parent Leaders. On the day the project office opened the training program began for 20 parent leaders. The project staff had given considerable effort to interpreting the need for these leaders and had received much help from the personnel office in interviewing and hiring. Additional parent leaders were hired and sent to the training program until April 12, when employment was closed because the remaining portion of the program did not allow enough time for complete training. The parent group represented 32 of the 40 target schools.

The training program included nine eight-hour and seven four-hour sessions from March 28 through April 12. An additional four-hour session was held for the five junior high school parent leaders, some of whom had been enrolled in the training late, to help in some specific matters pertaining to programs in their schools. Child care aides were invited to a one-day training program with the parent leaders to interpret their specific duties and to coordinate their work with the parent leaders.

The training sessions included samples of programs that parent leaders could use in their study-discussion groups. Books, pamphlets, films, film strips, recordings and resource persons were used to study characteristics of children and their development.

Techniques of leadership studies included how to organize a group, how to plan and arrange the meetings, how to involve parents, how to lead discussion, how to publicize a meeting and how to make personal contacts with the parents. For example, to help in contacts with parents, the head of one of the school system's social service centers spoke on recruiting low-income families for family life education programs. A supervisor of the parochial schools, working as a liaison between the parochial and public schools, gave tips on recruitment of parochial parents into the parent study-discussion programs.

To help parent leaders plan and conduct meetings, committees of leaders-in-training were formed and given the responsibility of developing a parent study-discussion program. These trial programs were presented by each committee with the other members of the training program acting as members of a parent study-discussion group. To hear how others do it, the parent leaders attended an annual meeting of the lay leaders of parent study-discussion groups. This meeting provided inspiration and fellowship as well as information.

Understanding of Cincinnati's school programs, of what Cincinnati schools offer children, was developed by the participation in training programs of the director of guidance services, the associate supervisor of compensatory education, and the acting associate supervisor of curriculum development. The two supervisors in charge of the 1966 summer school programs for disadvantaged children were able to give to these leaders information which could be transferred to other parents in time for their children to take advantage of summer offerings. One of the supervisors in Head Start interpreted this program to the parent leaders, suggesting that parent leaders might have parent study-discussion groups on the value of pre-kindergarten and might further individually interpret Head Start in home visits to interest parents in sending their children to the centers. In some schools parent leaders participated in Head Start recruitment. The supervisor of home economics, in a program on child development, was able to interpret the home economics program in our schools.

Among the visual aids studied for use in a parent study-discussion group were the filmstrip The Parents' Role in Teaching of Reading and the films A Desk for Billy, The Drop-Out and Skippy and the Three R's. These visual aids would help parents realize their important role and give them the understanding, education and belief in themselves necessary to help their children. Lists of other visual and audio materials compiled for a parent study-discussion use were distributed to the leaders.

Qualified community leaders participated in training and served as an example of how community people could be used in parent study-discussion meetings. A former head nurse at the Cincinnati Children's Hospital, who had studied widely in the field of social health, participated in the training program in the specialized field of sex education. Later this person functioned as a paid consultant in parent study-discussion groups since consultant fees had been included in the budget. A former teacher was also used as a consultant concerning the role of the parent in stimulating reading. This consultant service was of limited use the first year of the project, but greater demand for it is anticipated since the enlargement of our parent study-discussion programs is making heavy demands on school personnel.

Cultural and educational trips were taken to demonstrate what should be done at the local school level to encourage parents to enrich the experience of their children and to continue their own education. These trips included a Seven Hills bus excursion; a combined visit to a Board of Education building, the Art Museum and the Natural History Museum; walking trips to the Taft Museum and the main public library; and visits to Courter Technical High School and Stowe Adult Center.

The parent leader training program was coordinated with the work of several community agencies. The local superintendent of the Bureau of Public Health Nursing interpreted health services and ways of using them to the parent leaders. Personnel from the Victory Neighborhood services agency and the Cincinnati Union Bethel accompanied the group on the trip to Stowe. The director of the Parent Education project kept in contact with these agencies. There was close interaction between the Community Action Commission programs and the parent leaders in their areas. Parent leaders also cooperated in the evaluation of the effects of the total Education Act program by administering a parent survey.

Parent leaders needed extensive knowledge to perform their jobs effectively. Such information was learned primarily through first-hand experience. They also needed to gain enthusiasm for the project and gain confidence in themselves and assurance that they could do the job. With their own self-image strengthened, they and their families would in turn set a community tone of desire for continued self improvement.

Materials for parent training and for study-discussion meetings were ordered, distributed and used upon receipt. Most orders took at least six weeks to arrive. Child care equipment, to be used while parents attended meetings, arrived too late for the first project year and was held for use in 1966-67.

After the initial training program, in-service training sessions were held to permit parent leaders to discuss their concern, share their ideas, and make suggestions for improving the program. Parent leaders were also invited to attend an early childhood workshop conducted locally by Dr. Martin Deutsch's staff. Some of the parent leaders participated in this workshop for the full two days.

Parent Leaders' Field Work. Parent leaders began work in their schools on a half day basis on April 13. Weekly study-discussion meetings were organized and conducted, with a bus tour permitted on one of the meeting days. Two of the 32 schools had nine meetings and 15 others had eight. Seven meetings were conducted in most of the remaining schools, but personal illness forced the resignation of one parent leader after only two meetings. In all, 231 study-discussion meetings were held.

Statistical reports were kept on membership and attendance. These figures show that the project served a total of 1626 parents, with an average of about 16 attending each meeting. Twelve single sessions, scheduled before the Parent Education project got underway, drew a total of 1874.

A Parent Participant Survey was given to study-discussion group members at one of the last meetings to evaluate the effectiveness of the project in each of the schools. The results of this survey are presented in the evaluation section of this report.

From reports given orally by parent leaders one can obtain an idea about the amount of effort expended in recruiting parent participants in study group programs. One of the leaders in a junior high school reported that she started with nine members and finished with 18 or 19. To recruit these participants she had to contact a total of about 200 parents. Another parent leader reported 377 contacts. One leader indicated difficulty in bringing people in the school who had not previously been inside the building.

In one school the parent leader was able to involve 133 parents or parent figures in her meetings. In all, these adults represented 418 of 909 children in this school. This parent leader indicated that half of her time was spent visiting homes. She found that parents seemed more willing to talk to another parent than to school personnel.

Other reactions from the parent leaders concerning the experiences in recruiting and in conducting the study-discussion meetings show great variation. Some of these are reported in the following evaluation section.

Evaluation Procedures and Results

Evaluation of the effects of the Parent Education project presents the same difficulties as the appraisal of other specific projects. Since parents served by this project might well have been influenced by other Education Act services provided for their children, it is impossible to attribute gains in parental attitude or understanding to any one project. It is logical, however, that the Parent Education project, since it was aimed at parents, probably contributed more to such improvements than any other single ESEA service.

Some items on the Student Survey and the Teacher Survey* used in ESEA program evaluation, are pertinent to parental relationships with children and with school. Since project services were offered to all target schools (32 of the 40 target public schools actually participated in the first year), the population represented in the surveys is probably essentially the same as that served by this project.

In addition to these survey responses there are three other sources of relevant evaluative information. Each of these offers some evidence of how well the project achieved its objectives.

Membership and attendance figures were kept for the study-discussion meetings in each school that was active in the project. These data indicate how many parents were reached with the information that made up the content of these sessions.

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* For a complete description and report of these surveys, see Journal of Instructional Research and Program Development, Volume 2, Number 1, 1966.

At one of the last project meetings a Parent Participant Survey was administered to obtain the parents' judgments of benefits received from the meetings. On this written survey parents were asked to check the extent to which the study-discussion sessions had helped them in ten specified respects, to indicate the number of meetings attended and to check yes or no for ten items concerned with various aspects of project participation. Since these responses were probably biased in a positive direction, the absolute percentages of affirmative answers should be interpreted with caution. The relative ranking of items is of greater significance than the percentages themselves.

Finally, notes based on oral reports given by parent leaders at a concluding session were transcribed. Because these reports were relatively unstructured, the open comments made by parent leaders may be more meaningful than any other available information.

Objective 1: To help educationally and culturally disadvantaged children by providing an opportunity for parents and parent figures to secure a better understanding of the physical, mental, social and emotional needs of these children. Success in achieving this objective as well as the other goals of the project is necessarily dependent upon the extent to which parent leaders were able to involve the parents in their areas in study-discussion meetings. Involving 1626 parents the 231 study-discussion meetings in project schools had an average attendance of about 16. Two schools offered nine meetings, most had eight, and the average for all schools was over seven. As one might expect, female parent figures outnumbered male by more than eight to one.

A few inaccuracies in the reporting of membership data make it impossible to determine what proportion of parents included in the project attended each session. However, the average number of meetings attended by each parent is 2.2.

From the responses of those who completed the Parent Participant Survey the percentages attending various numbers of meetings were computed for primary target and secondary target, elementary and secondary schools. These data, appearing in Table 1, present a more favorable picture of session attendance because the survey was completed at one of the sessions.

In their oral reports some parent leaders affirmed that they had been helped personally to a better understanding of their children. "I love my family a little better," said one leader. But the reports gave little or no indication of the extent to which other parents in their areas had profited in this regard.

The Parent Participant Survey, however, contains three items that provide some indication of the feelings of parents on this subject. Table 2 presents the results of this survey with items listed in rank order according to percentages of parents answering "very much." The response alternatives also include "some" and "not at all." When "some" responses are added to "very much" the combined percentage of affirmative responses totals at least 95% for every item in this section of the survey. However, the probability of bias in answering this kind of questionnaire should be kept in mind.

Although over 99 per cent gave an affirmative answer to each of three items related to this objective--i.e., to enjoy your child more; to understand children; and to know better how to talk with your child--these items rank in the middle in terms of "very much" responses. One might conclude that help in understanding children and dealing with them is neither the strongest or the weakest project result perceived by parents.

Table 1. Per Cents of Parents Attending Various Numbers of the Study-Discussion meetings in Primary Target and Secondary Target, Elementary and Secondary Schools.

Number of Meetings Attended	Primary Target Elem. (N=107)*	Primary Target Sec. (N= 29)*	Primary Target Average **	Secondary Target Elem. (N=201)*	Secondary Target Sec. (N= 18)*	Secondary Target Average **	GRAND TOTAL (N=355)
8	12.1%	17.2%	13.2%	13.4%	5.6%	8.2%	12.9%
7	15.9	24.2	17.6	14.9	0.0	13.6	15.2
6	7.5	10.3	8.0	10.0	5.6	14.1	11.8
5	10.3	13.8	11.0	11.4	0.0	10.5	10.7
4	10.3	6.9	9.5	9.0	0.0	8.2	8.7
3	10.3	0.0	8.0	14.4	0.0	13.2	11.2
2	22.4	17.3	21.3	14.4	16.7	14.6	17.1
1	11.2	10.3	11.0	12.5	72.1	17.3	14.9

* Number of different parents responding
**Weighted average per cent.

Objective 2: To help these children by aiding parents to understand and accept their role in the children's education. The Parent Participant Survey also had content relevant to the second objective of this project. Items on understanding children's school work and assisting with this work were lowest ranked in percentage of "very much" responses. On the other hand, parents evidently felt strongly that they had been helped to see how important their parental role is. This latter item is highest ranked.

The reports of the parent leaders also suggest an improved parent understanding of their role. Chiefly, this gain was indicated for the leaders themselves, but one parent leader reported evidence of increased sharing by an area parent in her children's activities.

Objective 3: To help these children by involving parents so that they may strengthen their contribution to the education of their children. Parent

Table 2. Per Cents of Parents Answering "Very Much" to Part A of the Parent Participant Survey by Rank Order of Items.

Survey Items	Type of School				
Do you feel these meetings have helped you:	Primary Target Elem. (N=120)*	Primary Target Sec. (N= 34)*	Secondary Target Elem. (N=222)*	Secondary Target Sec. (N= 20)*	Weighted Average Per Cent (N=396)
to know how important you are as a parent	85%	97%	75%	100%	81%
to see how the school is trying to help your child	79	97	72	100	78
to see how the home and school can work together	79	94	72	100	77
to enjoy your child more	79	100	69	100	76
to make it easier to talk with your child's teacher	82	94	63	94	72
to understand children	69	79	63	100	67
to know better how to talk with your child	68	94	57	94	65
to make you feel you are a better parent	63	88	62	100	65
to understand your child's school work	56	81	48	92	55
to be able to help your child with his school work	50	75	41	37	46

* Highest number responding to any single item (some questions were not answered by every parent).

leaders' reports have more content relative to this objective. Five of the leaders spontaneously reported increased parent involvement in their schools. One said that she had succeeded in bring to school a parent whom even the visiting nurse had not been able to contact.

Section C of the Parent Participant Survey contained four yes-no items related to parental involvement:

1. Have these meetings made you wish your friends were with you?
2. Have you brought a friend to a meeting?
3. Have you talked to friends about these meetings?
4. Have you offered to help at your school?

Responses were strongly affirmative except for the item on whether parents had brought a friend; on this item 58.9 per cent answered negatively. Most importantly, 74.5 per cent of the parents reported that they had offered to help.

Further information pertinent to this objective is available from responses on the Student Survey and the Teacher Survey, used in total program evaluation. The Student Survey, for example, asked whether pupils were praised at home for good school work, whether school concerns were discussed at home and whether some member of the family had talked with the child's teacher. Approximately three-fourths of 16,429 target school pupils answered these items affirmatively.

Relevant items on the Teacher Survey are especially useful because they offer a unique opportunity to compare January (pre-project) and June (post-project) data. Two of the concept terms rated by teachers are directly related to this objective, and two others have a less essential connection. The concept "Parent Involvement" was rated 2.5 per cent higher in June than in January by target school teachers, but 15.8 per cent lower by control school teachers. The ratings given "Parent Participation in School," "School's Attempt to Reach Parents" and "Supportive Attitude of Parents" were lower in June for both groups of teachers, but the decrease averaged 16.3 per cent for the control group and only 2.7 per cent for target teachers. Interestingly, primary target teachers gave all four items higher ratings in June than in January.

Of these differences, only those in the ratings of "Parent Involvment" seem great enough to justify concluding that target teachers saw an improvement in parent-school relations. The suggestion in all related items, however, is favorable in evaluating this aspect of project effectiveness.

Objective 4: To achieve for disadvantaged children the kind of parental support and cooperation with the school which will enable them to make maximum progress in learning. The favorable indications in the comparative ratings given "Supportive Attitude of Parents" are reinforced by other available evidence. First, a number of parent leaders felt that their visits to homes and the study-discussion meetings had promoted parental support and cooperation with the school. Six of the open comments by parent leaders specified improved understanding, communication, or interest. Three leaders reported that their efforts in the project seemed to have had a positive effect on the local unit of the P.T.A. Two others said that they had been influential in keeping potential drop-outs in school.

The Parent Participant Survey results contribute further evidence that this fourth objective was successfully achieved. Items on seeing how the school helps the child ("very much" 78%), seeing how home and school can work together ("very much" 77%) and making it easier to talk with teachers ("very much" 72%), all rank near the top.

Objective 5: To raise the "self-image" of the family and to develop a core of families who will become good examples for children and who will set a tone for continuing education for themselves, their children, and other members of the community. Consistently among the most difficult objectives to evaluate is the goal of improved self-image. Questions were included in the Parent Participant Survey to find out how the meetings had influenced the way the parents felt about themselves and their further education. In Part A parents were asked whether they now felt that they were better parents as a result of the meetings. Affirmative responses for this item totaled 98 per cent, with 65 per cent answering "very much." In Part C 88.0 per cent indicated that the meetings had motivated them to continue their own education.

Specific instances of parents who had been prompted to further their education were reported by eight of the parent leaders. Three leaders spoke of improved personal habits in the families of their area. A larger number said that they themselves had a better feeling about their job as a parent.

Procedural Considerations. The oral reports of the parent leaders provided a number of suggestions as to how the organization and administration of the project services might be improved. The following procedural recommendations appeared in the reports of more than one parent leader.

1. School principals should be given a more thorough interpretation of the project and the role of parent leaders. In some instances cooperation of the local administration was lacking.

2. Parent leaders need a suitable working area equipped with a telephone. Facilities provided for the study-discussion meetings were sometimes unsuitable.

3. There appears to be considerable demand for additional programs in the area of personal hygiene.

4. Study-discussion meetings should be organized and held at a time when fathers could be involved. In some cases this would necessitate evening meetings.

5. Since tours were among the more entertaining and profitable experiences, their frequency should be increased.

6. Parent leaders need more time to prepare for meetings. A profitable study-discussion session cannot be assured without considerable preparation.

7. Serving refreshments at the meetings would be an added incentive for attendance. One parent reported that her local P.T.A. had cooperated in providing refreshments.

Also relevant to the procedural objectives of the project are a number of items on the Parent Participant Survey. Specifically Section B, concerning the trips, seems to corroborate the feeling expressed by some of the parent leaders that these tours were beneficial and enjoyable.

Recommendations

Primary among the recommendations that might be made on the basis of this project evaluation is that more attention be given to interpreting these services to local school staff members. Specifically, the following suggestions present themselves:

1. That all target school administrators be further encouraged to make the services of this project available to parents of their pupils.

2. That the role of parent leaders be carefully interpreted to the school principals. These leaders cannot attain optimum effectiveness if they are prevented from contacting parents at home by an inordinate number of in-school duties.

3. That school administrators be encouraged to support parent leaders and to provide adequate facilities. A suitable working area and an appropriate place for study-discussion meetings seem to be minimum requirements.

4. That the project staff work very closely with principals in the selection of parent leaders. Since the success of the project is dependent upon the effectiveness of these leaders in interpreting the roles of school and parents, the selection should be made as objective as possible.

In addition, the following general recommendations are made:

5. That parent leaders be encouraged to work actively for the participation of the male parent. Absence of a strong, influential male parent figure is a common sociological finding among families that are culturally disadvantaged. Any possible effort to remedy this situation by interesting fathers in the education of their children would seem worthwhile.

6. That efforts be intensified to involve more parents of nonpublic school children in the study-discussion groups.

7. That a follow-up attempt be made to encourage those parents who expressed a desire to further their own education. Difficulty in taking the necessary steps to enroll in an educational program is often a serious obstacle to this method of self-improvement.

8. That parent leaders be given all possible assistance by the project staff and the local school administration in planning the study-discussion meetings. Increasing the emphasis on hygiene and other personal qualities, as suggested by a number of parent leaders, is probably worth considering.

9. That the cultural tours which proved to be among the most pleasant and beneficial experiences of the project be extended. Parents might be made more aware of the rich opportunities by the total community for the educational improvement of their families.

Summary and Conclusions

The Parent Education project was aimed at helping disadvantaged children through services to their parents. The chief focus of the project efforts was in helping parents to understand their children and themselves, and to become more involved in the education of their children through a realization of the importance of their own parental role. To achieve these goals one paid leader was selected from the parents in each school area. These leaders were given intensive training that included general leadership development, instruction in planning and conducting discussion programs, information on cultural and educational opportunities offered by the community and training in the use of resources and agencies.

In all, this training was given to parent leaders representing 32 of the 40 target public schools. By publicizing the project and contacting parents in their homes, these leaders involved a total of 1626 parents in one or more study-discussion programs. Average attendance for each session included about half the parents who had been enrolled from the area.

Responses on the Parent Participant Survey and oral reports of parent leaders point to many worthwhile gains in parents' relationships with children and school and understanding of themselves and their role as parents. No comparisons of pre-post project gains were possible except for the Teacher Survey, where target teacher ratings indicate some improvement in parent-school relationships.

These signs of success suggest that the services of this project be continued in the same essential structure as before. Careful attention should be given to interpreting the project services to school staff and to community. Special efforts should be made to involve male parents and parents of non-public school children. Finally, gains made in the first project year should be built upon by extending the strengths of the program and providing follow-up contact with the specific parents served.

SECONDARY SCHOOL REMEDIATION AND ENRICHMENT

Introduction

By the time the disadvantaged pupil reaches secondary school age, the culturally based obstacles to learning that have not been adequately dealt with have been compounded in number and complexity. As these individuals pass the age limit of compulsory school attendance, their lack of success and interest in the school very often causes them to terminate their education. The loss to the person and to society is tragic.

But whether they choose to place this limit on their personal accomplishment and their contribution to society or persist until they complete the amount of education consistent with their abilities and aspirations, these children are generally outside the mainstream of American culture. They are often described as "experientially deprived." Some of them have not ventured more than a few blocks from their own neighborhood. Lacking a variety of middle-class experiences, these pupils find it extremely difficult to relate to learning situations through media such as textbooks and class discussions.

Remedial and enrichment services to counteract these problems of pupils in primary target, secondary level schools are the nucleus of this project. The project involves one senior high school attendance area, which includes one public senior high school, three junior high schools, and the seventh and eighth grades of three parochial elementary schools.

The services provided through this project were supplemented by other projects that served these primary target children. The Health Services project, for example, was directed toward improving their physical condition, while the Parent Education project was aimed toward increased parental involvement in their education. Attending to these needs should make it possible for pupils to devote more energy to school work and should increase the chances of success of the motivational efforts of this project.

Services provided under the project are in five main areas: remedial help, individual and small group instruction, intensified pupil-personnel services, curricular enrichment, and welfare. These areas of service were specifically related to the objectives of the project. In the evaluation section of this report these relationships will be indicated.

Objectives

The objectives of the Secondary School Remediation and Enrichment project are as follows:

1. Raise the level of pupil achievement
2. Improve attendance
3. Reduce dropout rate
4. Improve pupil-motivation
5. Improve self-image of pupils

Project Narrative

Personnel. The Remediation and Enrichment project for primary target secondary schools began on February 1 and ended on August 31, 1966. The project was designed to provide necessary concentrated service to overcome obstacles to learning among disadvantaged secondary school pupils. Personnel was added to the staffs of the schools involved so that intensified remedial instruction could be given to small groups of students. Enrichment activities were provided to broaden their cultural background and personnel services were intensified to improve their adjustment to school.

Four schools were included in the project: Bloom, Cutter, and Porter Junior High Schools and Taft Senior High School. These are all of the public secondary schools identified as primary targets under the Education Act.

Six administrative aides were added to the staffs of these schools to take charge of implementing this project. These aides were directly responsible to school principals, and their duties varied according to each school's need. In addition to administration and supervision of the project, these aides were often assigned such tasks as textbook distribution, building and ground supervision, minor disciplinary action and pupil activity coordination. By attending to such responsibilities as these, the aides freed time for the building principals to give leadership to the project.

To provide concentrated attention to those pupils who need it most, four resource teachers were assigned under the project, one each in the areas of English, mathematics, social studies and science. These teachers helped the remedial teachers diagnose pupil deficiencies and plan appropriate instructional units. Resource teachers were responsible for suggesting and planning additional equipment and materials. They also assisted in carrying out some of the enrichment activities provided for pupils in project schools.

To carry out the necessary remedial instruction, fifteen teachers were employed to work with classes of about fifteen pupils each in the areas of English, mathematics, social studies and science. Remedial teachers were also responsible for providing enrichment activities considered appropriate for their classes.

As a means of intensifying the personal services provided for these pupils, two counselors and two visiting teachers were employed under the project. One counselor was assigned to Taft High School to work with potential drop-outs. He was to identify such pupils and provide intensive counseling services to encourage them to stay in school. The drop-out counselor also had the responsibility of following up on school withdrawals and seeking employment opportunities for such pupils. He also worked on occupational orientation of seniors. A second counselor was assigned to Bloom Junior High School to provide basic counseling services for 325 pupils at that school. The two visiting teachers were used to supplement existing social services rendered to project pupils and to work more intensively with these pupils than the regular social service staff was able to do.

From the local school community, nine resident aides were hired to perform a variety of non-professional functions. These included the formation of and giving leadership to parent study-discussion groups as well as supervision of locker rooms, washrooms and corridors, and helping the nurse with clerical work. The key concept in the use of resident aides was providing a link between the community and the school.

To attend to the clerical details of the project and free the other personnel to make optimal use of their time, nine clerk-typists were added to the staffs of project schools. These persons were responsible to the administrative aide of each building and performed the various secretarial and clerical duties necessitated by project services.

Equipment and Supplies. A substantial part of the budget for the Secondary Remediation and Enrichment project was allotted for the purchase of equipment and supplies that would be specially suited to disadvantaged children. Special materials were purchased for remedial work in reading, math, science and social studies. Various guidance materials were also obtained.

In addition, a number of audio-visual instructional devices were purchased to increase the effectiveness of the remedial teaching. This equipment included overhead projectors, movie projectors, controlled readers, record players, typewriters and miscellaneous scientific apparatus. Unfortunately, most of this equipment arrived too late for use in the first project year.

Each of the public schools in the project, however, had a limited amount of instructional equipment prior to the beginning of the project. Such items as controlled readers, overhead projectors, and movie projectors were used by the project personnel to make instruction more comprehensible to pupils who have great difficulty with the printed page. The special materials and books supplied proved quite effective. Pupils who had given up on learning to read were coaxed into renewed effort with reading materials easy enough for them, but with appeal to their interests.

Services. The pupils most in need of remedial help in one or more areas of instruction were placed in groups of not more than fifteen pupils each. These groups, taught by the remedial personnel hired for the project, were paired with remedial sections taught by regular staff members.

Primary goals in the remedial sections were to kindle interest in education, to remedy or remove the effects of previous poor learning and to instill good study habits and wholesome attitudes toward education. Work was planned individually so that each pupil could meet with success at the beginning of the remediation. Instruction and materials were kept as flexible and varied as possible. Pupils were removed from remedial sections and returned to regular class placement as soon as they were able to keep up with regular class work.

The four resource teachers helped the remedial teachers locate appropriate materials, plan classroom acitivities, and arrange for field trips or other culturally enriching experiences. Most of the field trips were closely related to class work so that they would supplement the instruction and stimulate interest. Other excursions were cultural in nature to give pupils new types of experiences. For example, science classes visited the Museum of Natural History, hunted fossils in the parks and studied exotic plants at the Krohn Conservatory. Social studies classes learned about the city through the Seven Hills Bus Tour and through visits to various industries. English classes saw plays or movies at downtown theaters, thereby being stimulated toward discussion and reading. Classes in mathematics were introduced to computer processes and modern banking methods through direct experience.

Many pupils in the project were in need of financial assistance to stay in school. For some of these, clothing was purchased, while others were furnished a daily hot lunch. Such school supplies as pencils, pens, notebooks, gym shoes or gym suits were bought when pupils could not supply them. Bus fare, supplied through the Health Services project, was available for pupils to keep clinic or dental appointments.

The project counselor at Taft worked closely with potential drop-outs and with those seniors who would find it difficult to get jobs after graduation. His guidance centered on such areas as: job seeking skills; job opportunities in the metropolitan areas; post-high school training programs for entry jobs, skilled trades, and technical or semi-professional jobs; and part-time employment.

Organizing and administering these project services in schools that were already being used at almost full capacity was difficult. Space problems were aggravated by the organizational and scheduling difficulties that resulted from beginning the project at mid-year. Other special difficulties involved decisions as to which of the eligible pupils to serve and provision of service to non-public school pupils. Despite these difficulties, the Secondary Remediation and Enrichment project completed the first project year with a record of 2,379 pupils receiving direct services.

Evaluation Procedures and Results

Because of the broad range of this project and the related elementary project in primary target schools, much of the information collected for the overall evaluation of the Education Act program is pertinent here.* The procedure for evaluating this project will be to narrow the focus to the secondary level primary target schools only and to relate the findings to specific project objectives. Data used in evaluating this project include the following: selected items from the Teacher Survey, Student Survey and Parent Survey; achievement test data collected for grades seven through eleven; promotion, attendance and drop-out rates; and self-image data.

Because the project began late in the year, marked changes are not expected to appear in this evaluation. In most cases, pre-project data are not available. Even where earlier baseline data are available, however, comparison with current findings will not be extensive. This report is more concerned with whether the direction of the project seems to correspond to the needs indicated by the data. At best, one might hope to identify a few services or project goals that do not seem adequately covered by current organization and plans.

Objective 1. Raise the Level of Pupil Achievement. Nearly all the remedial and enrichment services of this project are directed principally to raising the achievement level of disadvantaged pupils. It must be realized, however, that gains in pupil achievement are normally accomplished slowly, so that it is not likely that any appreciable differences would appear in the achievement of pupils after only five months of Education Act services. To establish a baseline, however, all project pupils were tested with the Stanford Achievement Tests in May, 1966. The results of these tests will be the principal focus of this section.

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*For a complete report of this evaluation, see the Journal of Instructional Research and Program Development, Volume 2, Number 1, October, 1966.

That disadvantaged pupils commonly achieve at a lower level than the general population is a fact frequently discussed in professional literature. This lower achievement is usually attributed to environmental deficiencies rather than lower mental ability. The concept undergirding this project is that intelligence is an emerging phenomenon, not a static condition. Learning builds upon previous learning through experience. Teachers in the primary target schools see a need to raise the level of achievement among these pupils. This fact is evident when one compares the June Teacher Survey ratings of primary target and non-target school teachers on the item, "Achievement of pupils." Non-target teachers rated this item much higher (a full unit on a seven-point evaluative scale) than the primary target teachers.

In an attempt to meet this need, the Secondary Remediation and Enrichment project provided the following services:

1. Remedial instruction in English, reading, mathematics, social studies and science.
2. Furnishing needed school supplies
3. Increased attention given to pupils by specialized school personnel: counselors, drop-out and resource coordinators and administrators.

The results of the Stanford Achievement Tests administered in May to project pupils in grades seven through eleven are shown in Tables 1 and 2.

Interpretation of these scores should be tempered by two factors. First, the norms on the Stanford Achievement Tests are demanding because the norming population was considerably above national average with respect to scholastic aptitude (Otis I.Q. median 106-109). Secondly, the ESEA evaluation required a large volume of testing to be performed in a short period of time and the conditions under which these achievement tests were taken were not believed to be conducive to optimal performance. Teachers and administrators reported that pupils seemed weary of testing, and this condition probably kept them from doing as well as they might have if the test sessions had been spaced over a longer period of time.

The test results shown in Table 1 were obtained from the four primary target junior high schools which contain grades 7, 8 and 9. The scores reported are grade scores. Since the tests were administered in May, the grade norm is the grade level plus 9 months. The median battery mid-scores for grades 7, 8 and 9 are seen in Table 1 as 5.5, 6.1, and 6.7, respectively. The deviations of these mid-scores from their respective norms are -24 months, -28 months and -32 months, for grades 7, 8, and 9, respectively. The deviations from norm increase each year by four months, reflecting a wider range from norm.

The subtest showing the highest grade score achievement in all three grades is Spelling, while the lowest subtest achievement in all three grades is Language. (These observations were true also in the elementary grades.) Rote learning methods are typically used in teaching spelling. One might speculate that spelling is taught often because it is subject to rote learning, simple evaluation and pupil feedback, and subject to controlled classroom management. These factors may account for this relatively high achievement. The relatively low achievement in language is one of the

Table 1. Summary of Stanford Achievement Grade Scores for Primary Target Secondary Schools by Grade, Subtest, and Quartile Points.

Subtest		Grade Level								
		7			8			9		
	Quartiles:	Q_1	Q_2	Q_3	Q_1	Q_2	Q_3	Q_1	Q_2	Q_3
Paragraph Meaning		4.3	5.2	6.1	5.0	6.0	7.1	5.4	6.4	7.7
Spelling		4.7	6.1	7.4	5.2	6.7	7.7	6.2	7.7	9.4
Language		4.0	4.8	5.8	4.6	5.4	6.6	4.9	5.8	7.2
Arithmetic Computation		4.5	5.4	6.2	5.1	5.8	7.5	5.7	6.6	8.2
Arithmetic Concepts		5.2	6.0	6.8	5.6	6.5	7.7	6.2	7.1	8.1
Arithmetic Applications		5.3	6.0	7.0	5.6	6.5	7.7	6.0	7.2	7.9
Social Studies		4.8	5.5	6.4	5.2	6.2	7.2	5.8	6.7	7.8
Science		4.6	5.2	5.9	5.0	5.8	6.9	5.4	6.4	8.1
Battery Mid-Score		4.7	5.5	6.3	5.2	6.1	7.3	5.8	6.7	8.0

most typical characteristics of disadvantaged children. To teach language in such a way as to be meaningful in the life space of these children is most difficult. Further, deficits in language are very conspicuous when these children enter school.

The test results for the (one) primary target senior high school are shown in Table 2. The Stanford High School battery reports T-score norms, not grade scores. While the battery administered included an English sub-test, those results are not reported because of errors in scoring the test. Twelfth grade students were not tested because of their already heavy test schedules and because their graduation will prevent follow-up.

For T-scores such as those reported in Table 2, a score of 40 (one standard deviation below the mean) is equivalent to the 16th percentile, while a T-score of 45 is equivalent to the 30th percentile. Thus, the median achievement on the three subtests is between the 16th and 30th percentiles. This achievement exceeds that of earlier grades and probably reflects a selection factor due to school drop-out of the lowest achievers.

Achievement data from years preceding the project that might be compared with those from the first project year are not available. Although achievement measurement is a part of the city-wide standardized testing program, occasional changes in the instruments used and lack of data assembled by schools make it impossible to make such comparisons. As noted above, however, this is not considered important since a few months of concentrated service is likely to have very little effect on pupil achievement as measured by standardized tests. The important comparison will be the 1967 achievement data with these baseline measurements.

Table 2. Summary of Stanford High School Battery Achievement Tests Results (Standard Scores) for Primary Target Senior High School Students by Grade, Subtest and Quartile Points.

Grade Level Quartile	Reading	Numerical Competence	Mathematics Part "A"	Battery Mid-Score
Grade 10				
Q_1	36*	35	39	36
Q_2	41	41	45	41
Q_3	46	46	49	46
Grade 11				
Q_1	38	35	38	38
Q_2	43	41	44	43
Q_3	48	46	50	48

*These are standard scores (T-scores) with a mean of 50 and a standard deviation of 10.

A few items of information do afford some indirect indications of the effect of the project on pupil achievement. Teacher Survey ratings, responses to surveys of parents and pupils, and pupil promotion rates may be examined for this purpose.

Comparing primary target teachers' ratings on the item "Achievement of pupils" in January and June provides an index to appraise change. These January and June ratings may be further compared with those of secondary target and control teachers to offset the possibility that differences were an effect of time of year rather than of actual perception of change. Primary target secondary teachers rated the achievement of pupils 11.6 per cent higher in June than in January. The ratings of secondary target and control teachers, on the other hand, decreased in June: the secondary target rating by .9 per cent and the control by 10.6 per cent.

Teachers, then, evidently saw some indication of increased achievement among the primary target pupils. There is some evidence that parents also felt that their children were achieving at a higher level. On the Parent

Survey, 99 per cent of the parents of primary target, secondary level pupils reported that their children were improving in their school work. This percentage of affirmative response ranks this item well above the overall mean of 91 per cent on the 14 item questionnaire.

Responses from pupils were considerably less affirmative, with 56 per cent indicating that they were doing better in their school work. This percentage is significantly lower for secondary level primary target pupils than for elementary. It ranks the item in the bottom half of the 20 items on the survey.

Available data on pupil promotion permit a comparison of 1965-66 rates in primary target secondary schools with similar data from the preceding five-year period. These data are reported in Table 3.

Comparison of promotion rates in primary target schools during the base years and 1965-66 show an over-all increase from 89.2 per cent to 91.6 per cent--an increase of 2.4 per cent. The highest increases were in grades nine (6.9%) and eight (4.2%). The differences in the various grades are great ranging from -5.7 per cent in grade eleven to +6.9 per cent in grade nine. In contrast, similar comparisons within non-target schools show a slight over-all decrease in promotion rate, from 92.3 per cent in the base years to 91.7 per cent in 1965-66, a decrease of .6 per cent. The variation of these differences is very small (in contrast to the primary target schools) ranging from -.6 per cent in grades ten and twelve to +.7 per cent in grade eight.

During the 1965-66 school year, it appears that in general, the promotion rates in primary target schools (91.6%) and non-target schools (91.7%) are about the same, but whereas the former schools increased, the latter remained essentially (-.6%) the same. While this may be an interesting observation, it is unlikely that the increases in promotion rates in the primary schools are a result of the Education Act. Tests of statistical significance of difference will be applied in the comparisons with comparable 1967 data.

Objective 2. Improve School Attendance. Examination of absence rates in primary target secondary schools shows them to be higher than any others in the city. If pupil absence is excessive, extensive in-school services aimed at remediation and enrichment can hardly be effective. Thus, improved attendance is indeed a necessary objective of the project.

Ratings on the June Teacher Survey for items concerned with tardiness and attendance reflect an awareness that this problem exists. Primary target secondary teachers rated both "Degree of tardiness" (2.96) and "School attendance of pupils" (3.15) markedly lower than secondary teachers in non-target schools (3.99 and 4.40, respectively). The difference was 1.03 for tardiness and 1.25 for attendance.

Project services aimed at remedying this problem were:

1. Increased home visits and services by visiting teachers
2. Increased health supervision
3. Provision for school supplies, clothing and lunches for a limited number of pupils.

It should be noted that while the June ratings above by teachers in primary target schools were low for tardiness and attendance they did in fact represent a favorable change over the ratings given in January. The rating for tardiness increased 8.4 per cent and that for attendance 12.9 per cent, suggesting that teachers felt better about both aspects of pupil behavior. The significance of these increases is more impressive when compared to other schools. Ratings on these same items by secondary

Table 3. Promotion Rates for Primary Target and Non-Primary Target Secondary Schools Comparing Base Years* with 1965-66 by Grade Level.

	Primary Target Schools			All Non-Primary Target Schools		
Grade	Base Years*	1965-66	Difference	Base Years*	1965-66	Difference
12	91.8%	89.0%	-2.8%	94.0%	93.4%	- .6%
11	91.5	85.8	-5.7	93.5	93.0	- .5
10	87.9	90.4	+2.5	91.0	90.4	- .6
9	88.8	95.7	+6.9	92.0	91.5	- .5
8	88.6	92.8	+4.2	92.3	91.6	- .7
7	88.9	90.7	+ .8	92.1	91.2	- .9
Weight Average All Grades	89.2	91.6	+2.4	92.3	91.7	- .6

*Promotion rates averaged for the five year period 1960-61 to 1964-65.

target teachers decreased 3.9 and 2.5 per cent, while those of control teachers decreased 29.2 and 28.1 per cent, respectively.

These comparative ratings suggest that teachers in project schools saw some improvement in pupil attendance patterns. This impression cannot be verified legitimately by comparing the year's attendance records before and after the project started because attendance is known to show much normal variation with time of year. It is possible, however, to consider the rates for the entire school year in relationship to those for the years that preceded. Such a comparison both for primary target schools and all the secondary schools in the city is made in Table 4.

Table 4. Average Daily Absence Rates for Primary Target Secondary Schools Compared with City-Wide Rates by Year.

	Primary Target Rates		City-Wide Rates*	
Year	Junior High	Senior High	Junior High	Senior High
1960-61	13.6	9.2	9.0	6.7
1961-62	14.4	9.3	9.2	7.0
1962-63	14.4	9.3	9.5	7.1
1963-64	14.0	10.6	9.6	7.8
1964-65	13.8	11.7	9.4	8.7
1965-66	15.0	11.5	9.9	9.0
Average	14.2	10.3	9.4	7.7

*Includes primary target schools.

The percentages of average daily absence in Table 4 indicate that the trend has been for absence to show a general increase, with junior high absence consistently exceeding that of senior high. Interestingly, the pattern in primary target schools closely resembles the city-wide pattern, although primary target rates are consistently higher. In 1964-65, for example, both primary target and city-wide absence rates dropped slightly at the junior high level but increased sharply for senior high. The 1965-66 school year shows a continuation of the general trend toward increased absence, but the percentage for the one target senior high school decreased slightly. This small decrease cannot safely be attributed to any particular cause. It may be simply a function of the high rate of the preceding year.

Actual attendance data, then, give no indication of improvement in the first project year. After services have been continued for a longer time, comparative data will indicate whether these services do bring pupils to school more regularly.

Objective 3. Reduce the Drop-Out Rate. Keeping pupils in school until they complete a level of education that suits their abilities and aspirations is essential to any program of educational improvement. The numerous studies of drop-outs that have been done in recent years have identified characteristics of pupils who leave school prematurely. Many of these traits are common among children of disadvantaged areas.

In Cincinnati the percentage of drop-outs in the disadvantaged neighborhoods has been perennially higher than in suburban areas. This project sought to remedy this situation through:

1. Intensified personnel service
2. Provision of help in locating part-time employment

Job opportunities offered to young people in school through the Economic Opportunity Act gave many senior high school pupils the economic assistance they needed to continue their education. Meanwhile, increased counseling and social services were used to encourage them to stay in school and to facilitate the efforts of other project personnel to provide effective remediation and enrichment.

That this combined effort had a beneficial effect on primary target pupils is evident from an examination of the data in Table 5.

Table 5. Percentages of Pupils Dropping Out of Primary Target Schools Compared with Non-Target Schools (September-June) by Grade and Year.

	Primary Target Schools				Non-Target Schools			
Grade	63-64	64-65	65-66	Total	63-64	64-65	65-66	Total
12	6.2	9.1	6.2	7.3	3.8	4.6	4.6	4.4
11	11.0	13.0	13.7	12.5	6.7	7.0	7.7	7.0
10	12.6	16.6	10.7	13.2	7.9	8.6	8.9	8.5
9	9.1	8.9	10.4	9.5	3.9	4.0	5.1	4.4
8	5.0	5.7	4.9	5.2	2.4	2.0	2.3	2.2
TOTAL	10.0	10.3	8.1	9.4	5.3	5.6	6.0	5.7

These data indicate the percentages of drop-outs in primary target schools over a three-year period as compared with those of non-target schools throughout the city. The percentages are based on the ratio of the number of pupils withdrawn from school during the school year, except for death or transfer, to the total pupil accountability, i.e., end of year membership plus drop-outs. Percentages for the seventh grade, which are usually very low because of compulsory attendance laws, are not reported.

Although non-target drop-out rates have tended to rise slowly over the three years, the primary target rates show an increase in 1964-65, but drop off in 1965-66. The net decrease is 2.2 per cent; tenth grade drop-outs are down 5.9 per cent.*

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* In a personal communication with the counselor of the school, it was his opinion that the reduced drop-out rate was chiefly a function of jobs made available to these students through the Neighborhood Youth Corps.

Despite this decrease, primary target drop-out rates remain appreciably higher than non-target rates in every grade. In view of the widespread concern over the drop-out problem and the promising indications that increased opportunities and personal services can relieve it, it seems advisable to continue to emphasize this project objective. If future operational grants permit, it would probably be beneficial to increase pupil personnel services to a much greater degree, providing more adequate counseling and social service to disadvantaged pupils so that they are not impelled to leave school before completing the program.

Objective 4. Improve Motivation. All the goals stated in the preceding three objectives presume an increase in motivation on the part of the project pupils. If achievement levels are to be raised and if absence and drop-out rates are to decrease, pupils must be prompted to take a greater interest in school work. This project aimed to improve motivation through:

1. Remedial instruction
2. Individualized services to pupils
3. Parent involvement in school programs.

As with other items on the Teacher Survey, "Motivation of my pupils" was rated considerably lower by primary target secondary teachers than by secondary teachers in non-target schools (3.85 and 4.52, respectively). However, this June rating by primary target teachers represents a 4.6 per cent increase over the ratings given by these same teachers in January. Again, this slight increase takes on more importance in view of the fact that the ratings of secondary target and control teachers decreased in June. Teachers, then, seemed to see some increase in the motivation of project pupils.

Objective 5. Improve Pupil Self-Image. The self-image of disadvantaged pupils is generally regarded as lower than that of the average pupil. Many authorities have expressed the view that it is essential to raise this self-image before one can properly motivate the youngster and before he is able to achieve to his maximum potential.

Teachers of primary target pupils indicated that they, too, view image of self as somewhat low among disadvantaged pupils. The rating given this item on the Teacher Survey in June (3.21) is considerably lower than that given by non-target secondary teachers (4.54). Because the self-concept is multidimensional, one may view all services provided by this project as aiding in the development of a more satisfying self-concept.

The June Teacher Survey rating represents an increase of 5.9 per cent in the estimate of project pupils' self-image. On the other hand, secondary target and control ratings on this item decreased in the June survey. Comparison of the June ratings given by primary target, secondary target, and control teachers shows the control ratings higher than primary target, with secondary target ratings lowest of the three.

This same general pattern appears in the results of the House-Tree-Person test given to pupils in grades 7-9. Scores based on eight factors that are believed related to self-image were highest for control schools. Primary target scores were somewhat lower, but again the secondary target scores were lowest of the three groups.

By contrast, the results of the locally constructed What I Am Like instrument show the self-image of primary target pupils to be highest of the three groups and that of control pupils, lowest. What I Am Like measures self-image in three contexts: physical, psychological, and social.

Pupils rate themselves on a five-point bi-polar adjective scale. In all three areas the ratings of primary target secondary pupils were above the theoretical mid-point of the scale: physical, 3.88; psychological, 3.86; social, 3.77.

One final source of data related to pupil self-concept is available. On the Student Survey pupils themselves were asked the following four questions: "Are you satisfied with report card grades?", "Are you doing better in your school work this year?", "Do you think you will graduate from high school?" and "Do you hope to go to college?" Only on the last item was there a significant difference among primary target, secondary target and control groups. The percentage of affirmative responses to this question was highest for secondary target schools, with primary target and control groups following in that order.

Just over half (56%) of primary target pupils indicated that they thought their school work had improved. Only 31 per cent, however, said that they were satisfied with their report card grades. For the most part, then, project pupils seem to see themselves as capable of better school work than they are doing. Ninety-four per cent of the responding pupils said they thought they would graduate from high school and 71 per cent indicated they hoped to go to college.

From all this data there emerges a hazy picture of the self-concept of project pupils. The results of the various instruments used to measure self-image seem somewhat contradictory when the project group is compared with other groups in the study. What does seem clear, however, is that the self-image of these pupils tends to be rather favorable, perhaps more so than has been suspected. Unfortunately, this must be a tentative conclusion because normative data (particularly for suburban children) are not available for the instruments used in this appraisal. Only after future measurements have been taken will it be possible to determine the effect of continued project services on pupil self-concept with these data viewed as baseline measurements.

Recommendations

The following recommendations are made:

1. That continued emphasis be placed on raising the achievement of primary target secondary pupils. This effort should focus on a relatively small group of students given intensive services on a more individualized basis. It is unlikely that differences in school achievement will be noted if services are spread too thin among students within a school. A subgroup of students within a school must be identified and receive intensive services. Pupils who were put in remedial sections and returned to regular class placement within a short period of time probably should be kept in these remedial sections for at least the full school year.

2. That provision be made for employing additional social service personnel. Increasing the visiting teacher services should be viewed as a means of improving school attendance and pupil motivation as well as further involving parents in the education of their children.

3. That provision be made to hire additional counselors in target schools who take on the specialized function of giving service to drop-outs or potential drop-outs. In this capacity, arranging for part-time work to solve the financial problem of these children is most important.

4. That the job of administrative aides be focused on coordinating ESEA services within a school rather than being a general administrative aide for the whole school.

5. That target school teachers examine the implication of the apparent discrepancy in pupil self-image. There is reason to believe that teachers rate this lower than pupils. Possibly the values upon which pupils judge themselves are sufficiently different from the basis of teacher's judgement to cause this discrepancy.

Summary and Conclusions

The Secondary School Remediation and Enrichment project is aimed toward improving the education of primary target pupils in one senior high school attendance area. Remedial and enrichment services are designed to correct educational and cultural deficiencies. Through the use of additional personnel, the project made it possible to provide small group instruction that could be adapted to individual pupils and increased attention to personal needs.

Although establishing a baseline was the primary goal of data in the first project year, the information gathered does point to a reasonable degree of success in the first months of service. The project seems to be answering definite needs felt by teachers, pupils and parents of the primary target schools. Resource and remedial teachers are working for improved instruction to raise the achievement of pupils. While the limited data available for pre-post comparison give some promising signs of success in the work of these teachers, valid conclusions cannot be drawn until future achievement data are collected for comparison with first-year test results.

Increased visiting teacher and counselor service offers similar promise of success, with a decrease in drop-out percentages being perhaps the single most favorable finding of this evaluation. Addition of still more personnel in these critical service areas seems called for.

As these project pupils continue in school, a systematic attempt will be made to measure their progress. On the basis of this ongoing evaluation, project services may be modified or refined in order that the attention given to these disadvantaged pupils might be of optimal benefit in remedying their academic deficiencies and enriching their background.

Division of Program Development
December, 1966

SECONDARY SUMMER SCHOOL

Introduction

To build upon the gains made in the Secondary Remediation and Enrichment project, an extensive summer school project was inaugurated for secondary level pupils in Cincinnati's primary and secondary target schools. Pupils typically make little or no gain in academic achievement in the period of summer vacation, and when the environment in which they spend this time offers no intellectual stimulation, they generally regress in achievement level. The Secondary Summer School project strives to overcome this problem and further to raise the educational achievement and aspiration of disadvantaged pupils.

The project was aimed at pupils in the seventh, eighth, ninth and twelfth grades. It focused on five major need areas: 1. remedial help in reading and arithmetic, 2. enrichment in art, music, social studies, science and drama, 3. improvement of advanced study skills, 4. individualized instruction and direction, 5. financial assistance for transportation, lunch, etc.

To serve such needs as these the Secondary Summer School project offered small group instruction in reading improvement, remedial arithmetic, science, social studies, art, music, junior theatre, junior typing and pre-college study skills. Except for the pre-college workshop, these classes were open to the seventh, eighth and ninth grade pupils living in the target areas. Teachers, counselors and administrators screened pupils for eligibility on the basis of their abilities and needs. The pre-college workshop was open to twelfth grade pupils who had made definite college plans. Finally, the project encompassed a program of service to actual and potential drop-outs involving intensive counselor and visiting teacher service.

Objectives

The objectives of this project were:

1. To raise level of pupil achievement
2. To inculcate skills of reading, arithmetic and studying
3. To improve pupil motivation
4. To build and reinforce interests in art, music, social studies, science and drama
5. To improve self-image of pupils.

Project Narrative

Inauguration. The Secondary Summer School project, offering remedial and enrichment instruction to educationally deprived pupils, was approved in March, 1966. In April additional funds were made available, and the project was expanded.

The expanded project provided junior high school pupils with remedial instruction in reading (8 classes) and arithmetic (18 classes); it also furnished enrichment experiences in science (6 classes), social studies (7 classes), art (2 classes), music (3 classes), junior theatre (1 class), and junior typing (8 classes). A pre-college workshop, housed on the University of Cincinnati campus, was available to 60 graduated seniors who were registered for college for autumn, 1966. The expanded project also included counselor and visiting teacher services for youth who had dropped out of school and for those pupils identified as potential dropouts. Through this service pupils were encouraged to complete their education either by returning to the regular school program or by registering for some other form of education or occupational training.

On March 15 a project director was assigned to administer the project. Summer school centers were established, classes for each center were scheduled, and recruitment procedures were determined. The eight target schools at the secondary level (Ach, Bloom, Cutter, Heinold, Hughes, Porter, Sawyer, Robert A. Taft) were designated as summer school centers. All classes began June 20 with junior high sections meeting on alternating days, 8:00 a.m. to 12:00 noon, for six weeks. Pupils in the pre-college workshop attended daily, 8:00 a.m. to 12:00 noon, for seven weeks.

Project Participants. Forty-three teachers and three coordinators were involved in the remedial and enrichment activities. These persons held planning sessions with subject supervisors prior to the opening of summer school. Length of planning time varied among the components, from two days to a maximum of five days.

Of the 55 classes scheduled at the junior high level, one section of Music Enrichment and one section of Junior Theatre were closed because of insufficient enrollment. A total of 885 pupils, of whom 128 were from non-public schools, completed the junior high instructional program. An additional 150 pupils who had enrolled dropped out of the project before completion.

Forty-one graduated seniors, nine from Hughes and 32 from Taft, completed the Pre-College Workshop. There were no drop-outs; however, sixteen additional seniors pre-registered for the project but did not participate. Because graduated seniors were not allowed to take part in Neighborhood Youth Corps work projects, a number of the prospective participants had to locate full-time summer work.

Materials and Activities. Materials used successfully in reading improvement classes include paperback copies of novels and short stories of interest to teenagers, sets of Pleasure Reading Series, Wildlife Adventure Series, and the Turner-Livingston Series. Audio-visual materials arrived too late for full use in the summer program. However, the following aids were found valuable for further trial and experimentation:

Tachist-O-Films, Classroom Reading Program, IV and Classroom Reading Program, VII, ordered from Learning Through Seeing, Inc.; and the sound film strips, Developing Effective Reading Study Skills, from Bailey Films, Inc.

Teachers in the remedial arithmetic component indicated success with Encyclopedia Britannica Press materials, Math Workshop, Levels E and F; and Modern Mathematics for Achievement, Parts 4 through 8, from the Houghton-Mifflin Company.

Pre-college workshop materials included copies of literary works such as Beowulf, The Odyssey of Homer, and The Old Man and the Sea. In addition, a variety of printed materials, appropriate for the pre-college level, were studied, analyzed and discussed. Typical titles from this group are How to Read a Poem, How to Study in College, Handbook to Literature, A Short Guide to Writing a Critical Review, and An Approach to Literature.

Community resource persons shared their collections, experiences and talents with pupils of art and science sections. Pupils of music and drama classes attended several professional performances.

Each of the enrichment classes participated in a number of field trips. Field trips available for each subject area were as follows:

Science--Mt. Airy; Miami Whitewater Forest; University of Cincinnati; Bone Lick State Park, Kentucky; Hueston Woods; Newtown Fish Hatchery; Krohn Conservatory, Ault Park; Warder Nursery (Finneytown); California Water Works, Gest Street Sewage Plant.

Social Studies--Boone County Airport; Armco Steel Mills, Middletown, Ohio; Cincinnati Art Museum; Berea College, Berea, Kentucky; boat ride down Ohio River; Cincinnati Gas and Electric, Beckjord Plant, New Richmond, Ohio; State Capitol; Ohio State University, Columbus, Ohio; F.B.I.; Fort Ancient, Lebanon, Ohio; Meyer Meat Packing Company; Cincinnati Museum of Natural History; train ride from Union Terminal to Norwood; Playhouse in the Park (rehearsal); Post-Times Star; Johnson and Hardin Printing Plant; Seven Hills Tour; Shillito's (one hour behind-the-scenes in a large department store); Urban Renewal Tour; Wright-Patterson Air Force Museum, Dayton, Ohio.

Art Enrichment--Art Festival, Cincinnati Zoo; tour of Mt. Adams, Art Museum; Cincinnati Summer Opera; Doerr Ceramic Studio; home of Dr. Robert Fanning, Covington, Kentucky; Career Opportunities Tour; Gibson Art Company; Tomar Gift Shops; Shillito's (advertising department); Dr. Robert Fabe's Studio.

Music Enrichment--Cincinnati Summer Opera; University of Cincinnati College of Music, orchestra rehearsal; Wurlitzer Company, organ concert; Cincinnati Art Museum; Ohio State University, Columbus, Ohio; International 70, The Sound of Music; Murray Seasongood Pavillion, Eden Park (pupils presented program).

Junior Theatre--Shroder Junior High School, pupil presentation of Winnie the Pooh; Playhouse in the Park, Charley's Aunt; Cincinnati Summer Opera; University of Cincinnati Mummer's Guild, The Fantasticks; Edgecliff, The Boy Friend.

Traditional marks, A through F, were not given for either the remedial or the enrichment classes. Rather, pupils were rated either Excellent, Good or Poor on their participation and attendance. These ratings are reported in the evaluation section of this report.

Pre-college Workshop sessions provided on-campus experience to prepare students to compete academically at the college level. Small group work was conducted, and individual student-teacher conferences were held at designated intervals. Participants were also encouraged to engage in independent study.

The drop-out program was concentrated in the target school areas and included all children who reside in these areas. This component provided counseling and referral service for out-of-school youth and for pupils identified by their teachers and counselors as potential drop-outs. All pupils referred to the program received written notification of the services available, and home visits were made by teams of counselors and visiting teachers.

Services were given to 391 pupils of the target school areas who had dropped out of school. These pupils were encouraged to return to regular school or attend adult education classes. Some were referred to training classes and community work programs. These young people will be followed through regular counseling and visiting teacher services, and will be given additional help as needed.

Counseling service was also given to a total of 919 pupils identified as potential drop-outs. These youngsters will continue to receive the attention of their teachers and counselors in an attempt to motivate the development of positive school attitudes.

Reactions of project personnel to all phases of the project were essentially positive. Teachers were enthusiastic about the possibility of continuing the project, and pupils indicated appreciation and enjoyment of their summer experiences. One comment written by an eighth-grade boy to his teacher perhaps best summarizes pupil-reactions: "So God bless you and our Summer School."

Evaluation Procedures and Results

The Secondary Summer School project offered remedial instruction in two academic areas, reading and arithmetic. These classes were designed primarily for below average achievers. Classes in science and social studies, on the other hand, were enrichment offerings intended to broaden the experience of the more successful pupil and to raise his level of achievement still higher. For all four academic areas, therefore, achievement test results are a key source of evaluative information. These test scores will be used to evaluate the project's success in achieving the first objective.

Evaluation concerning the second objective will focus on the project components of Junior Typing and the Pre-College Workshop. The development of typing skills as measured by a timed writing exercise will be the basis for the evaluation of this component, while two questionnaires administered to workshop participants will be discussed in connection with the pre-college sessions.

Ratings of pupil participation and attendance given by teachers in the junior high school classes will be used as an index of pupil motivation in relation to the third objective. Under this same heading, the services provided to actual and potential drop-outs will be discussed.

Other enrichment components of the project, namely art, music and theatre, will be evaluated on the basis of questionnaires under the heading of the fourth objective. Unfortunately, little information is available for an appraisal of the effect of the project on pupils' self-image, the focus of the fifth objective of the project.

Objective 1. To raise level of pupil achievement. The Education Act project offering remediation and enrichment to secondary school pupils during the regular school year endeavored to raise the achievement level of primary target pupils. Baseline test data from the end of the school year show that the achievement level of these pupils is somewhat below the national norm in all areas. Normally little or no growth would be expected to take place during the summer period of absence from school. Indeed, in the case of disadvantaged children, there is usually a decline in achievement level over the summer months.

The summer school project for secondary pupils attempted to overcome this regression and to continue the progress that pupils in all target schools had made in the previous school year. For the four academic areas in which remedial or enrichment instruction was given, i.e., reading, arithmetic, social studies and science, pupils were tested in their classes at the end of the summer session, using Form W of the Advanced Stanford Battery. The achievement scores of the test covering the area of instruction were compared with those from the same test given at the end of the preceding school year.

Table 1 shows the pre-test and the post-test mean raw scores on the four tests relevant to these instructional areas. The sample included all students for whom pre and post test data were available. Average gains in achievement ranged from 1.73 to 4.95 raw score points. Statistical tests showed that these gains are significant for Paragraph Meaning, Arithmetic and Science. The small increase in Social Studies is not significant at the .05 level.

It may be safely concluded, then, that the remediation and enrichment offered by the summer school project did in fact raise the achievement level in at least three areas. This appears to be a worthwhile benefit in contrast to the decline that normally occurs over the summer months for disadvantaged pupils. In fact, the achievement gain is considerably greater than that suggested by test norms as the expectation for a few months of instruction. The gain in the Paragraph Meaning average raw score, for example, represents an achievement gain of about six months in grade placement scores.

Table 1. Comparison of Mean Raw Scores on Pre-Post Achievement Tests of Pupils in Junior High Summer Classes.

	(N)	Pre-Test	Post-Test	Diff.	$S.E._{Diff.}$	t
Para. Meaning	(54)	18.93	21.91	2.98	.621	4.80*
Arithmetic	(121)	28.54	30.79	2.25	.608	3.70*
Social Studies	(48)	36.79	38.52	1.73	1.149	1.51
Science	(46)	26.48	31.43	4.95	.927	5.34*

*Significant at the .01 level.

Objective 2. To inculcate skills of reading, arithmetic and studying. Acquiring skills may be viewed as a necessary foundation for increased achievement. Since achievement gains in reading and arithmetic have already been noted, one need only assume that higher test performance reflects the application of improved skills to establish the project's success in achieving the second objective.

Other components of the summer school project were aimed at improving individual skills related to academic work. Junior high school pupils were offered a class in introductory typewriting. This Junior Typing class assumed that the pupils had had no previous instruction or experience in typing. Pupils were tested in a three-minute timed writing exercise at the end of the session and scored on the number of words typed per minute. The gross-words-per-minute scores were adjusted at the rate of ten off for each mistake to yield the net-words-per-minute scores. The quartile points of the distribution of these scores are shown below.

Gross Words	Net Words
Q_1 = 15.75	Q_1 = 11.55
Mdn.=20.88	Mdn.=14.80
Q_3 = 26.00	Q_3 = 19.46

This test exercise indicates that the average pupil progressed from no typing skill at all to being able to type accurately about 15 words a minute. One may assume that the course also laid the foundation for further development of this skill for use in securing gainful employment or as a useful asset in the pursuit of further knowledge.

For graduating seniors who had been accepted for college admission in the fall, the project offered a workshop in reading and study skills. Participating students were asked to complete a self-rating scale at the beginning of the workshop and again at the end. The results of this questionnaire are shown in Table 2.

Table 2. Mean Pre-Post Test Self-Ratings of Pre-College Workshop Participants On 18 Questionnaire Items.

Item Number	Item	Pre-Test Mean Rating June, 1966 (N=35)	Post-Test Mean Rating July, 1966 (N=35)	Difference
1.	I take meaningful notes from lectures.	3.00 3.00	2.97 2.97	-.03 -.03
2.	I take meaningful notes on what I read.	2.58	2.50	-.08
3.	I have purposeful, independent study habits.	2.67	2.60	-.07
4.	I write clear, concise paragraphs.	2.44	2.51	+.07
5.	I write effective compositions.	2.47	2.50	+.03
6.	I am successful in taking objective tests.	2.92	3.09	+.17
7.	I am successful in taking essay tests.	2.84	2.91	+.07
8.	I understand and remember what I read.	2.72	3.23	+.51
9.	I can find the main idea in novels and short stories.	2.97	3.00	+.03
10.	I can find the main idea in essays.	2.69	2.76	+.07
11.	I can find the main idea in poems.	2.69	3.20	+.51
12.	I can find the main idea in plays.	2.97	2.88	-.09
13.	I am trying to learn new words from what I read.	3.31	3.56	+.25
14.	I am trying to use new words in my speaking and writing.	3.06	3.35	+.29
15.	I know how to use a library effectively.	3.27	3.57	+.30
16.	I can talk about ideas clearly and correctly.	2.77	3.03	+.26
17.	I am trying to improve my everyday speech.	3.38	3.46	+.08
18.	I feel at ease on a college campus.	3.31	3.60	+.29
	MEAN	2.89	3.04	+.15

Rating themselves on a five-point scale concerning 18 reading and study skills before and after the workshop, participants gave a mean pre-test rating of 2.89 and a mean post-test rating of 3.04. This increase is not statistically significant. Only two of the 18 items show significant gains: "I understand and remember what I read " and "I can find the main idea in poems."

Participants were also asked to evaluate the workshop and to offer a suggestion for its improvement. The majority of the 23 respondents reacted positively to the overall length of the workshop (70%) and of the individual class meetings (91%). All but one thought having the workshop on campus was beneficial. About 30 per cent of the respondents indicated a desire for still further individual assistance from the teacher. Of eight areas of study skills dealt with in the workshop, participants rated English Composition as most important by a wide margin. Improvement of Reading Speed and Comprehension, and Vocabulary Building were also rated highly. Least important in the judgment of the participants were Library Usage and Speech Diagnosis and Training.

Objective 3. To improve pupil motivation. Ratings on the motivation of pupils are not available on a pre-post basis. Teachers in the summer school project did, however, rate pupils on their participation and attendance, instead of giving the traditional form of mark. Each pupil was rated either Excellent, Good or Poor on both aspects of performance. A summary of these ratings is provided in Table 3.

For participation, the number of Excellent and Good ratings given by summer school teachers was about the same with 85 per cent of all ratings divided between two categories. The 133 Poor ratings are divided over all subjects except Junior Theatre, in numbers ranging from 5.5 (Art Enrichment) to 20.3 per cent (Junior Typing). Interestingly, in the four academic areas, the percentages of Poor ratings within subject areas rather closely parallels the significance of achievement gains reported in Table 1. The exception is Social Studies Enrichment, which had fewer Poor ratings than

Table 3. Teacher Ratings of Pupil Participation and Attendance in Summer School Classes by Subject.

Component	No. Classes	No. Pupils	PARTICIPATION						ATTENDANCE					
			No. of Pupils			Percent of Pupils			No. of Pupils			Percent of Pupils		
			E*	G*	P*	E	G	P	E	G	P	E	G	P
Reading Improvement	8	112	58	41	13	51.8	36.6	11.6	56	46	10	50.0	41.0	8.9
Remedial Arithmetic	18	297	110	130	57	37.0	43.8	19.2	134	104	59	45.1	35.0	19.9
Science Enrichment	6	111	43	60	8	38.7	54.1	7.2	75	24	12	67.6	21.6	10.8
Social Studies Enrichment	7	147	64	59	24	43.5	40.1	16.3	78	39	30	53.1	26.4	20.5
Art Enrichment	2	36	24	10	2	66.7	27.8	5.5	22	10	4	61.1	27.8	11.1
Music Enrichment	3	53	18	30	5	34.0	56.6	9.5	18	30	5	34.0	56.6	9.4
Junior Theatre	1	11	10	1	0	90.9	9.1	0	5	5	1	45.4	45.4	9.2
Junior Typing	8	118	50	44	24	42.4	37.3	20.3						
Totals			377	375	133				388	258	121			
Percent of Total						42.6	42.4	15.0				50.6	33.6	15.8

*E = Excellent
*G = Good
*P = Poor

Remedial Arithmetic and a comparatively high percentage of Excellent ratings, although achievement gains were non-significant.

In the case of attendance ratings, just over half the total for all subjects were Excellent, and about a third were Good. The percentage of Poor ratings (15.8%) is nearly the same as for participation. The poor ratings for individual subjects cluster around 10 per cent except for Remedial Arithmetic and Social Studies; in these two areas about a fifth of the pupils were rated as having poor attendance. No attendance ratings were given for Junior Typing.

A component of the Summer School project that focused sharply on pupil motivation was the attempt to give service to out-of-school youth and to potential drop-outs in target school areas. This service involved 30 professional personnel: a coordinator, an assistant coordinator, 19 counselors and 9 visiting teachers. These individuals devoted up to four weeks each to increasing the motivation of drop-outs and pupils who had been identified as potential drop-outs.

Social Service Center records were used to identify school age youth who were not enrolled in a regular day school program. Referrals of pupils with low motivation or other characteristics typical of drop-outs were made by the target schools. Each of the 1310 young people identified in these two ways was sent a letter announcing the services offered by the project. Subsequent personal contact was made with all but 76 of this group.

Working as teams, counselors and visiting teachers provided guidance and counseling service to encourage those who had been referred to return to school in the fall. In some cases, appropriate agency referrals were made for youth who were not likely to profit from further school experience. Some were encouraged to attend part-time classes in continuing education, and others were referred to training classes and community work programs.

The 1310 youngsters contacted consisted of 919 potential and 391 actual drop-outs. By the end of the drop-out effort, 978 of the 1310 had made concrete plans to return to the regular day school program in the fall. An additional 113 planned to attend afternoon or evening adult education classes. A total of 214 referrals were made to such opportunity agencies as the Neighborhood Youth Corps, the Preparation for Employment Program for Special Youth, the Job Corps, and Manpower Development and Training.

Only 17 youngsters were reported as having existing commitments that would make it impossible or inadvisable to participate in some educational or work-training program. Another 54 were already involved in some "positive program" (presumably other than school), which they chose to continue.

Objective 4. To build and reinforce interest in art, music, social studies, science and drama. This objective pertains to the project components emphasizing enrichment rather than remedial instruction. Classes in each of the areas specified by the objective were offered to target school youngsters in seventh, eighth and ninth grades who seemed likely to profit from such enrichment.

In addition to the evidence offered by achievement test scores concerning the success of these enrichment services, attempts at evaluation were made through questionnaires administered in a number of classes. Art Enrichment classes in Taft and Sawyer, for example, were given a pupil questionnaire at the end of the course. Pupils were asked to answer questions about the kinds of work they did, what they enjoyed most and what field trips yielded the most benefit.

Among the items the pupils made and worked on were paintings, drawings, enamel work, tissue, papier maché, clay, batiks, glass and water colors. Of these, enameled works were the most popular: 27 of 29 respondents reported completing this activity, 20 said they enjoyed it most, and 17 considered it their best work.

The field trips taken by the classes were ranked by the pupils as to how much they had gained from them. The three highest ranked trips were: 1) tour of Dr. Fanning's home; 2) career opportunity tour; 3) tour of Mt. Adams.

Questionnaire responses provide some evidence that the Art classes did, in fact, stimulate pupil interest. Twenty of the 29 respondents indicated plans to take some form of art in their regular school program within the next two years. Also, 22 of them said they had worked on artistic endeavors of their own outside the summer school sessions. Most of these activities were with clay moldings and sculptures.

The pupils in the Junior Theatre class were given a questionnaire designed to measure both knowledge and interests at the beginning of the summer session and again at the end. In general, comparison of pre-post results of this questionnaire indicates marked differences in knowledge directly related to the course content, but rather limited changes in less related areas. Similarly, areas of interest seemed to have been influenced rather slightly. For example, a number of items on the questionnaire concerned the students' tastes in television shows and motion pictures. These seemed to change little from pre to post tests. On the other hand, the responses to the question "What is the best play you have ever seen" did show a definite pre-post change. Most of the factual items that changed noticeably were on such content as what goes on backstage during a play, the contribution of sets and lighting to the production, etc. On the final questionnaire all respondents indicated that they intended to continue seeing plays.

Objective 5. To improve self-image of pupils. Because of the brief duration of the summer term, no organized attempt was made to measure pupil self-image before and after the summer session. It would seem unrealistic to expect the subtle changes that are hoped for in this regard to be measurable over such a short span of time.

A very limited portion of the evaluative instruments used for components of the project were relevant to self-image. Specifically, the self-rating scale given to Pre-College Workshop participants might be considered indicative of certain aspects of self-image. In addition, the questionnaire taken by Junior Theatre class members contained a number of self-image items such as "What would you be if you could be anything you wanted?" Both sources of information offer a slight suggestion of improved self-concept but offer no basis for confidence that the objective was really achieved. Such goals as this can best be measured in terms of the effect of total Education Act program over a period of time. Presumably, if the program evaluation conducted at the conclusion of the next school year does indeed show that the self-image of pupils has improved, an indeterminate portion of this gain might be reasonably attributed to the summer school project.

Recommendations

The following recommendations are offered to guide project personnel in their planning of the summer school services for the coming year:

1. That a careful attempt be made to link the summer school project with the remediation and enrichment services offered at the secondary level in the course of the regular school year. Special focus should be maintained on the same pupils who received most intensive service through the year. This continuity is likely to increase the effectiveness of these services by making it easier for the pupils to continue their intellectual growth through the summer months, rather than slipping back as culturally disadvantaged pupils have typically done in the past.

2. That a thorough effort be exerted to improve the level of pupil motivation in the enrichment and remediation classes. Although such motivation to continue academic work in the summer months is frequently difficult to achieve, some teachers have been successful with attempts to link the learning process to immediate goals of the pupils, to plan varied, interesting activities, etc. There is a suggestion of a relationship between the teacher ratings of pupil participation in their classes and the gains in achievement made by the pupils. This relationship will be examined more closely in the coming year. If the correlation is indeed high, as one would normally expect, motivation appears to be a particularly important part of the objectives of the project.

3. That field trips be continued as an important part of the enrichment experiences in the summer project. Careful attention should be paid to linking these field trips with the classroom work in each subject area. Although establishing this connection for pupils has long been recognized as essential to the value of field trip experiences, pupils often fail to grasp this relationship and tend to consider the recreational value of the trips as most significant.

4. That the Pre-College Workshop be continued essentially according to the same format as in previous years. As far as possible, employment opportunity should be made available to pupils who need summer income to make college financially possible. There is evidence that workshop participants recognize worthwhile gains from this experience. Whether these gains actually enable them to meet with success in their college program will be investigated through a follow-up of workshop participants.

5. That the component of the project offering assistance to drop-outs and potential drop-outs be maintained. This service should be available not only to those pupils receiving intensive counseling help in the regular school year through the Secondary Remediation and Enrichment project, but also to all out-of-school youth and all those residing in target school areas who have been identified as potential drop-outs.

Summary and Conclusions

The Secondary Summer School project was planned to extend the benefits of the Secondary School Remediation and Enrichment project for the regular school year into the summer months. It included pupils in grades 7, 8, 9 and 12 residing in the primary and secondary target school areas. Project services consisted of remedial instruction in reading and arithmetic; enrichment experiences in science, social studies, art, music and drama; typing and pre-college workshop classes; and a drop-out assistance program.

Principal findings of the evaluation of these components are:

1. A comparison of scores on standardized achievement tests before and after the summer session indicates significant gains in achievement on Paragraph Meaning, Science and Arithmetic tests and a smaller gain on Social Studies.

2. Median typing skill achieved by members of this class was a production rate of about 15 words per minute.

3. Pre-College Workshop participants believed themselves to have gained significantly in their ability to understand and remember what they read and derive meaning from the reading of poetry.

4. Pupils in art, music and drama enrichment classes generally seemed to recognize benefits from the summer experiences and indicated some amount of interest in taking further training or acquiring new experiences in these areas.

5. Most pupils assisted in the drop-out effort indicated enrollment in some kind of formal education (83%), with 75 per cent actually registering for the regular day school program.

Pupil benefits hoped for as a result of the first full year of project services should be kept in mind. An attempt should be made to link remedial and enrichment instruction offered in the regular school year with the summer school project. Motivation of pupils should be a special concern of summer project personnel. On the whole, no marked changes in the components of the project or the services included seem indicated by the findings of the evaluation.